



STATE OF WASHINGTON  
WASHINGTON STATE BOARD OF HEALTH  
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## **DRAFT REPORT**

### **Zoonotic Diseases and Exotic Pets: A Public Health Policy Analysis**

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The document is a proposal for discussion purposes only. While the opinions, conclusions or recommendations contained herein reflect those of the zoonotic diseases workgroup, this document has not been accepted, approved, or endorsed by the Washington State Board of Health.

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## Executive Summary

Animal-borne, or *zoonotic*, diseases have afflicted human populations throughout history. Over time, advances in public health and better control of animal vectors have reduced Americans' risks of contracting many such diseases. However, the ability to rapidly transport people and commercial goods over long distances increases the possibility that susceptible populations will be exposed to new and previously eradicated diseases. Recent national and global events involving West Nile virus (WNV), monkeypox, severe acute respiratory syndrome (SARS), and avian influenza have captured media headlines, created intense public concern, resulted in extraordinary efforts and expenditures by public health agencies, and increased our awareness of our vulnerability to animal-borne diseases. In particular, monkeypox drew our attention to the potential for the introduction of communicable diseases via the exotic pet trade. After responding to the monkeypox outbreak, public health agencies in Washington State saw a need to review and evaluate their authority to reduce the risk of future zoonotic disease outbreaks associated with pet animals, and to control any outbreaks that do occur.

A workgroup comprised of representatives from the Department of Health (DOH), local public health jurisdictions, and the State Board of Health (SBOH) formed to review and evaluate public health authorities, assess the exotic pet trade in Washington and make recommendations for ways to reduce the risk of and manage zoonotic disease outbreaks. The group analyzed federal, state, and local laws regarding pet animals in the context of the public health mission to prevent and control communicable diseases. In addition, the workgroup assessed the impact and scope of the exotic pet trade in Washington using several resources, including a survey of local health jurisdictions and others.

We found that the purposes and intents of existing laws pertaining to exotic animals vary. Federal laws aimed at protecting public health primarily address importation and interstate commerce activities involving exotic animals. Other federal laws address issues such as animal welfare, environmental or agricultural protection, or species preservation. State laws related to exotic pets differ significantly between states. Washington State laws grant specific authorities to SBOH and the Secretary of Health regarding pet animals as well as broad authorities with respect to communicable diseases. Additional state laws include regulations to prevent and control rabies and psittacosis. Local animal-related laws also vary greatly. At least one county in Washington requires owners to license their large exotic cats and some localities prohibit certain animals, but many cities and counties do not have such requirements or restrictions.

Some sources suggested that ownership of exotic pets is very common in Washington. We found evidence that several different species of animals are bred, exhibited, and sold throughout the state. However, local health jurisdictions reported that they receive few reports of injuries, disease transmission, or other problems associated with exotic pets. Compared to public health personnel, animal control officers and exotic pet veterinarians seem to be more familiar with exotic animal breeders and pet owners and aware of more incidents of injuries associated with these animals. A more methodical and extensive assessment of the situation is necessary to verify this information and draw conclusions from it.

Disease transmission from animals to humans, while rare, does occur. Reptile-associated salmonellosis is one of the most commonly occurring zoonotic infections. Other zoonotic infections documented in Washington include tularemia, hanta virus pulmonary syndrome, plague, psittacosis, and rabies. Most transmissions occur between wild animals and humans, suggesting that risks are also involved with capturing native wild animals to keep or sell as pets. Other cases of zoonotic infections have been linked to petting zoos and fairs.

The following recommendations to SBOH and DOH are supported by the findings and conclusions discussed throughout this report. These recommendations propose ways that public health can use its authority, influence, and current capacity to prevent, manage, and reduce the risk of zoonotic disease outbreaks associated with exotic pet animals.

**Recommendation 1: Develop a zoonotic disease response plan**

The Environmental Health division of DOH, in consultation with Communicable Disease Epidemiology program, should work with interested parties including other state agencies, local health jurisdictions, private organizations, research institutions, health care providers, and veterinarians to develop a zoonotic disease response plan. The plan should include a working definition of 'exotic pets,' a review of authorities and responsibilities, principles of disease containment, and reporting requirements and standards. The plan can also be used to outline and propose preventive measures, surveillance systems, and early warning processes. A benefit to developing a response plan is that it can be a dynamic resource that can be readily changed as circumstances require. The state's Communicable Disease Response Plan could be used as a model and the possibility of combining the documents and creating a zoonotic disease component within the Communicable Disease Response Plan should be considered.

**Recommendation 2: Revise existing rules on rabies and psittacosis**

WAC 246-100-191 and WAC 246-100-201 lay out measures to prevent and control human cases of rabies and psittacosis respectively. Rabies<sup>1</sup> (2004) and psittacosis<sup>2</sup> (2001) have been the subject of recent compendiums published by the National Association of State Public Health Veterinarians. The state rules should be reviewed in the context of these recommendations and changes should be considered. The King County Board of Health adopted a rabies rule in May 2004 that might be used as a model for the state (see Appendix B-1).

**Recommendation 3: Give further consideration to adopting a point of sale education requirement for all reptile sales**

Responsible reptile handling and hygiene practices should be promoted to reduce the risk of reptile-associated salmonellosis. We recommend that DOH and SBOH explore options such as adopting a point of sale education requirement for retailers of reptiles. Other

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<sup>1</sup> Centers for Disease Control and Prevention. Compendium of Animal Rabies Prevention and Control, 2004. *MMWR* 2004;53(RR-9):1-6.

<sup>2</sup> National Association of State Public Health Veterinarians. Compendium of measures to control chlamydia psittaci infection among humans (Psittacosis) and birds (Avian Chlamydiosis), 2001.

options may also exist and the efficacy of these should be examined and compared to point of sale education programs. The Environmental Health division of DOH should convene a task force to do further study on this issue. It may be appropriate to conduct this evaluation in the context of the rule revisions discussed in Recommendation #2.

**Recommendation 4: Monitor the situation and periodically reevaluate whether additional regulation is needed**

Prior to convening this workgroup, DOH and SBOH did not have extensive knowledge of the exotic pet trade within the state. Our limited survey of local health jurisdictions, animal control agencies, and local veterinarians along with our assessment of the exotic pet population in Washington did not reveal significant public health problems at this time. We are aware, however that some human cases of zoonotic diseases occur in the state each year and that national and international events show that zoonotic diseases are threats to public health and outbreaks can occur at any time. Therefore, we recommend that as part of ongoing efforts DOH and SBOH should:

- Continue to collect information and gain familiarity with the exotic pet trade;
- Improve existing surveillance and data collection systems such as the animal disease surveillance system being implemented in collaboration with the Washington Animal Disease Diagnostic Laboratory and continue to work with other state agencies such as WSDA to coordinate reciprocal reporting;
- Assist local health jurisdictions as needed with increasing their awareness of exotic pets in their jurisdictions and developing regulations concerning licensing or registration requirements; and
- Build stronger collaborative relationships with other state agencies, local health jurisdictions, pet owner organizations, veterinarians, and animal rights groups. Integrate these efforts with those of other programs and activities with similar goals and purposes such as the Public Health Emergency Preparedness and Response program activities.

In addition, DOH and SBOH should periodically evaluate additional policy options and regulations and be prepared to exercise their authority to draft and adopt regulations regarding pet animals.

## **Introduction**

A rapid succession of zoonotic disease<sup>3</sup> outbreaks in the past few years has contributed to a growing concern over our vulnerability to animal-borne diseases. The United States recently experienced the emergence of diseases such as West Nile virus (WNV) and monkeypox. Global outbreaks of severe acute respiratory syndrome (SARS) and avian influenza have put our public health systems on alert. Diseases such as Rift Valley Fever and Nipah virus are closely monitored because of their potential to emerge in new areas and affect large numbers of people. The importation and trade of exotic animals may increase our risk of experiencing future outbreaks of these and other zoonotic diseases if imported animals carry infectious agents and are able to transmit them to people or native animals. Local, state, and federal laws govern the importation, sale, transport, and possession of exotic pets. These laws vary in their intents and are enforced by a variety of agencies. Understanding the scope of public health's authority to reduce the risk of—and if necessary control—a zoonotic disease outbreak was the purpose of a workgroup comprised of representatives from the Department of Health (DOH), local health jurisdictions, and the State Board of Health (SBOH).

The introduction of monkeypox, a disease endemic in Africa, to the United States is an example of how readily a disease can be introduced via imported animals and efficiently transmitted to other animals and to people. When the virus emerged in the United States, local, state, and federal agencies cooperated and acted swiftly to contain the outbreak. Ultimately, the containment and investigation of the monkeypox outbreak involved four federal Cabinet departments, five federal agencies, and numerous agencies in the 11 states to which investigators traced the potentially infected animals.<sup>4</sup>

No animals or people infected with monkeypox were reported in Washington, but the nature of the disease and the circumstances of the outbreak spurred local and state public health agencies to respond. DOH immediately enhanced disease surveillance for both animals and humans. It distributed alerts to veterinarians and health care providers statewide. The agency also collaborated with federal agencies such as the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the Centers for Disease Control and Prevention (CDC). DOH and local health authorities worked together to identify and distribute information to prairie dog breeders and dealers. The DOH Public Health Laboratory conducted lab testing on a sick hamster and a prairie dog. Two DOH programs, Environmental Health and Communicable Disease Epidemiology, conducted specific activities with local health departments and the FDA. In addition, the state health officer prepared a model health officer order that local health officers could use to restrict intrastate animal sales. At least one county ordered all pet stores to cease the sale of prairie dogs.

In the wake of this outbreak, public health agencies in Washington saw the need to evaluate the extent of their authority to act in the event of an emerging zoonotic disease

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<sup>3</sup> Infections that are passed from animals to humans.

<sup>4</sup> Trust for America's Health report titled "Animal-borne epidemics out of control: Threatening the nation's health." August 2003 <http://healthyamericans.org/reports/files/Animalreport.pdf>

associated with pet animals, and they formed a work group to address this need. See Figure 1 for a list of the zoonotic diseases work group members. Several questions and concerns arose about which entities had regulatory and enforcement authorities and whether the risks associated with monkeypox or similar outbreaks warranted specific measures on the part of local or state officials.

Figure 1. Zoonotic Diseases Work Group Members

Maxine Hayes, MD, MPH	Department of Health, State Health Officer
Maryanne Guichard, MPH	Department of Health, Environmental Health
Mira Leslie, DVM, MPH	Department of Health, Epidemiology
Chris Townley	Department of Health, Policy Constituents & Legislative Relations
Diana Yu, MD, MSPH	Thurston County Public Health, Health Officer
Darrell Cochran	Thurston County Public Health, Environmental Health
Sharon Hopkins, DVM, MPH	Public Health—Seattle & King County, Public Health Veterinarian
Craig McLaughlin	State Board of Health
Candi Wines, MPH	State Board of Health

This report is the result of that evaluation. It contains analyses of federal, state, and local responsibilities and authorities, as they exist in current statutes and regulations. The report focuses on issues related to international and interstate exotic pet importation and the breeding and distributing of exotic pets within the state. It also addresses some circumstances around native wildlife and animals in public settings, such as petting zoos and fairs.<sup>5</sup>

The purpose of this evaluation was to determine what changes, if any, are necessary to existing authorities and policies to prevent or reduce the risk of zoonotic diseases and to allow an adequate, comprehensive, effective public health intervention in the event of a zoonotic disease outbreak associated with pet animals. We collected and reviewed evidence on the presence and impact of exotic pets in Washington and how exotic pets are bred, sold, and brought in to the state. In addition, we examined the myriad of federal, state, and local regulations relevant to importing, possessing, and selling exotic animals as pets. The report concludes with specific recommendations for developing a statewide zoonotic disease response plan, updating existing rules, and improving and integrating existing surveillance and data collection systems.

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<sup>5</sup> Issues that are not addressed in this report include: 1) diseases associated with livestock, wildlife remaining in the wild, animals intended for use as food, or domesticated animals; 2) issues related to animal welfare or safety; 3) the environmental impact of importing foreign animals including species competition and disease introduction to native wildlife and domesticated animals; 4) vector-borne and parasitic diseases; and 5) the role of zoonotic diseases as bioterrorism agents.

## Background

### Zoonotic diseases

Zoonotic diseases account for more than 60 percent of recognized infectious diseases<sup>6</sup> and 75 percent of emerging diseases.<sup>7</sup> Epidemics of avian influenza, acquired immune deficiency syndrome (AIDS), and West Nile fever are examples of how, under certain circumstances, diseases can be introduced to and spread among a new population of susceptible animals and humans. See Table 1 for a list of selected zoonotic diseases. In Washington, endemic zoonoses include rabies, tularemia, plague, hanta virus pulmonary syndrome, tick-borne relapsing fever, Q fever, cryptosporidiosis, and reptile-associated salmonellosis. Zoonoses are less common than other infectious diseases (e.g. food-borne illnesses and sexually transmitted diseases), but they are of great public health concern because of their potential to cause large-scale outbreaks. Some of the most serious zoonoses are those associated with wild, exotic, or imported animals. A few zoonotic diseases, including monkeypox, SARS, rabies, salmonellosis, tularemia, psittacosis, and plague, are briefly described below to provide background information on these diseases and their epidemiology.

#### *Monkeypox*

Monkeypox is a viral disease marked by fever greater than 99.3°F (37.4°C), rash, swollen lymph nodes, and flu-like symptoms. The disease is endemic to central and western Africa, where the fatality rate is approximately 10 percent. Monkeypox was introduced to the U.S. in May 2003 through infected rodents imported from Africa for the exotic pet trade. Prairie dogs intended for sale as pets acquired the virus from the infected rodents and subsequently transmitted the virus to humans. Person-to-person transmission is possible via direct contact and by respiratory droplets, but all of the cases in this outbreak had direct contact with infected animals. By the end of July 2003, the Centers for Disease Control and Prevention received reports from six states of 72 possible human monkeypox cases of which 37 were confirmed by laboratory testing.<sup>8</sup> No deaths were associated with this outbreak.

#### *SARS*

SARS emerged in a remote region of China between November 2002 and February 2003 and rapidly spread to more than 24 countries in Asia, North America, South America, and Europe. SARS is associated with a newly recognized coronavirus, SARS-CoV, which infects the lower respiratory tract. Symptoms include fever greater than 100.4°F (>38.0°C), cough, and pneumonia. The fatality rate was 9.5 percent (778 out of 8,098) during the global outbreak of 2003. Preliminary research suggests that humans initially acquired the virus that causes SARS from an animal source in delicacy meat markets selling live animals. Antibodies to a closely related coronavirus were found in Himalayan

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<sup>6</sup> Council of State and Territorial Epidemiologists statement on “Developing Importation and Exportation Restrictions on Exotic and Native Wildlife with Potential Adverse Impact on Public Health,” 2004

<sup>7</sup> U.S. Senate Committee on Environment and Public Works hearing on importation of exotic species, July 17, 2003.

<sup>8</sup> <http://www.cdc.gov/ncidod/monkeypox/index.htm>



palm civet cats and raccoon dogs in the markets.<sup>9</sup> The majority of human cases in the global outbreak resulted from close person-to-person contact.<sup>10</sup> Since the World Health Organization (WHO) declared an end to the international outbreak in 2003, the agency continues to receive reports of sporadic SARS cases in China. In April and May 2004, officials from China reported a cluster of new SARS cases associated with two people who were exposed to the virus in a research laboratory.<sup>11</sup>

#### *Avian influenza*

Outbreaks of avian influenza occur regularly both nationwide and worldwide. In the United States, the U.S. Department of Agriculture (USDA) has an eradication program that monitors and controls outbreaks through depopulation of affected flocks. Concerns over the zoonotic potential of this disease have been heightened in the past few years after documented transmissions to humans. Separate outbreaks of avian influenza involving human infections occurred throughout the world in 2003 and 2004. Several populations of chickens and other birds throughout Asia, North America, and Europe tested positive for the H5N1 and H7 strains of influenza A. Thirty four people in Asia became ill with the H5N1 strain and 23 deaths were reported. Canada reported two human cases among poultry workers associated with the H7 strain. No human cases were reported in the U.S., however a flock of chickens in Delaware tested positive for the H7 strain<sup>12</sup> and a large outbreak in British Columbia, Canada was only 10 miles from the Washington State border.<sup>13</sup> Avian influenza is a potential threat to humans not only because humans in close contact with infected birds can acquire it, but also because it has the potential to mix with other strains in human and animal hosts and mutate into new strains that could be efficiently transmitted from person to person. Mutated avian influenza viruses are believed to have caused the 1918-1919, 1957-1958, and 1968-1969 global flu pandemics.<sup>14, 15</sup> In August 2004, Chinese health officials announced that they found the H5N1 strain of avian influenza in pigs at several farms; this may be significant if the virus is able to live and replicate in the pigs and be passed among them.<sup>16</sup> If a pig becomes infected with both the avian and human influenza viruses, the two viruses could potentially converge and create a new strain.

#### *Retroviruses*

Retroviruses are transmitted from non-human primates to humans in laboratory and zoo settings, however transmission in a natural setting has, until recently, only been hypothesized. A leading theory in the origin of the human immunodeficiency virus (HIV)

<sup>9</sup> [http://www.cdc.gov/ncidod/sars/civet\\_ban\\_exec\\_order.htm](http://www.cdc.gov/ncidod/sars/civet_ban_exec_order.htm)

<sup>10</sup> [http://www.cdc.gov/ncidod/sars/civet\\_ban\\_exec\\_order.htm](http://www.cdc.gov/ncidod/sars/civet_ban_exec_order.htm)

<sup>11</sup> [http://www.who.int/csr/don/2004\\_04\\_26/en/](http://www.who.int/csr/don/2004_04_26/en/)

<sup>12</sup> [http://www.who.int/csr/disease/avian\\_influenza/chronology/en/](http://www.who.int/csr/disease/avian_influenza/chronology/en/)

<sup>13</sup> <http://cahenews.wsu.edu/RELEASES/2004/04022.htm>

<sup>14</sup> a) Stevens et al., Structure of the uncleaved human H1 hemagglutinin from the extinct 1918 influenza virus. *Science*. 2004 Mar 19;303 (5665):1866-70. Epub 2004 Feb 05.

b) Gamblin et al., The structure and receptor binding properties of the 1918 influenza hemagglutinin. *Science*. 2004 Mar 19;303 (5665):1838-42. Epub 2004 Feb 05

<sup>15</sup> Klempner, M and Shapiro D, Crossing the Species Barrier – One Small Step to Man, One Giant Leap to Mankind, *NEJM* March 18, 2004, 350;12 (1171-72)

<sup>16</sup> Bradsher K. Lethal strain of avian flu is reported found in pigs in China. *New York Times*, August 21, 2004. NYTimes.com, accessed August 23, 2004.

pandemic is that the disease crossed into the human population in a remote area of Africa as humans encroached on jungle habitat and had increasing contact with chimpanzees infected with a closely related virus. Now researchers have documented transmission of a different retrovirus called simian foamy virus (SFV)<sup>17</sup> from non-human primates to people who hunted and butchered them in Africa. It is not known if SFV poses a threat to humans or can be transmitted from person to person;<sup>18</sup> however this finding is significant because it shows that a retrovirus can be transmitted through hunting and butchering activities. Some of the non-human primate species in the SFV study are known to carry simian immunodeficiency virus (SIV), a virus that is closely related to HIV.

### **Zoonoses endemic to the U.S. and found in Washington State**

#### *Tularemia*

Tularemia, also known as “rabbit fever” or “deerfly fever,” is a bacterial infection characterized by various clinical presentations depending on the virulence of the bacteria and the route of infection (inhalation, ingestion, inoculation, or contact with mucous membranes or skin). Features of the illness include necrotic lesions at the site of infection, fever, chills, nausea, pneumonia, swollen lymph nodes, fatigue, weakness, anorexia, and malaise.<sup>19</sup> If left untreated, the disease can be fatal to humans. Prairie dogs, rabbits, squirrels, muskrats, deer, bull snakes, sheep, wild rodents, cats, and dogs are known to transmit tularemia and many species are susceptible to infection. A recent study of wild-trapped, commercially traded prairie dogs implicated tularemia in the die-off of prairie dogs held at a commercial exotic animal facility. The results of this study suggest that prairie dogs might be chronic carriers of the disease.<sup>20</sup> Human cases of tularemia infection occur each year in Washington; there were two reported cases in 2003, one associated with a squirrel bite and the other with an insect bite. Also in 2003, a snowshoe hare tested positive for tularemia; other dead hares were found in the same area.

#### *Rabies*

Human infections with rabies rarely occur in Washington, however rabies post-exposure prophylaxis is frequently administered to prevent human rabies infection. Bats are the only known reservoir of rabies in the state, but all mammals including dogs, cats, skunks, raccoons, and coyotes can acquire and transmit rabies. Transmission occurs through bites from infected animals and occasionally from mucous membrane or fresh wound inoculation with infectious saliva or nervous system tissues. Rabies causes acute encephalitis and is almost universally fatal once clinical signs of the disease become apparent. Prophylactic measures taken soon after exposure are successful in preventing the onset of symptoms and include passive antibodies and vaccine.<sup>21</sup> The CDC received reports of 7,970 cases of animal rabies and three human deaths associated with rabies in 2002 from 49 states, the District of Columbia and Puerto Rico. In 2003, twenty-three

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<sup>17</sup> Wolfe, N. Lancet Mar 20, 2004

<sup>18</sup> Leeman, S. Comcast.net news March 18, 2004

<sup>19</sup> <http://www.bt.cdc.gov/agent/tularemia/tularemia-biological-weapon-abstract.asp#2>

<sup>20</sup> Petersen J et al. Emerging Infectious Diseases, [www.cdc.gov/eid](http://www.cdc.gov/eid), Vol 10(3) March 2004

<sup>21</sup> [http://www.cdc.gov/ncidod/dvrd/rabies/natural\\_history/nathist.htm](http://www.cdc.gov/ncidod/dvrd/rabies/natural_history/nathist.htm)

rabid bats were reported in Washington along with multiple human and pet exposures. This represents an increase from 12 rabid bats and one rabid cat reported in 2002.

### *Salmonellosis*

*Salmonella* is predominantly transmitted to people through contaminated food, but contact with animals that are shedding the bacteria and with surfaces contaminated by these animals can also result in infection. *Salmonella* infection causes diarrhea, fever, and stomach pain. The severity of symptoms can vary with the strain of *Salmonella* and the age and immune status of the person who is infected; children, immunocompromised persons, and the elderly could suffer severe complications from a *Salmonella* infection.<sup>22</sup> Pets commonly associated with salmonellosis include snakes, lizards, and turtles although other animals such as livestock and baby chicks can also be sources of infection. Estimates suggest that reptile and amphibian contacts are associated with 74,000 (6%) of the approximately 1.2 million sporadic *Salmonella* infections that occur annually in the United States. Among people younger than 21 years of age, the rate increases to 11 percent.<sup>23,24</sup> If these rates are applied to Washington State data, approximately 50 cases of salmonellosis out of the 600 to 800 cases reported each year are attributable to reptiles. A survey conducted in King County found that approximately 10 percent of the salmonellosis cases reported to Public Health Seattle-King County indicate either direct or indirect contact with reptiles and have no other obvious sources of infection.<sup>25</sup>

### *Herpes B-virus*

Herpes B-virus (*Cercopithecine herpesvirus 1*) is commonly found among non-human primates such as rhesus macaques, pig-tailed macaques, and cynomolgus monkeys. Macaque species are among the most commonly traded pet monkeys in the United States. They are also commonly used in research to model human disease. B-virus infection in nonhuman primates is a lifelong infection marked by periodic reactivation and shedding of the virus in saliva and genital secretions.<sup>26</sup> Antibodies to B-virus are found in 73 to 100 percent of wild and captive macaque populations. The virus can be transmitted to humans through bites and scratches. Human infections are rare, but they can be fatal as they are associated with severe meningo encephalitis. Forty cases of human B-virus infection were reported in the U.S. over a period of 61 years (1933-1994); the fatality rate associated with human B-virus infection is approximately 80%.<sup>27</sup>

### *Hanta virus pulmonary syndrome*

Wild rodents carry the viruses that cause hanta virus pulmonary syndrome (HPS), a severe respiratory illness characterized by fever, muscle aches, fatigue, and sometimes vomiting, stomachaches, and diarrhea. Four to ten days after the onset of symptoms, cough and shortness of breath develop. There are many hantaviruses worldwide. The one

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<sup>22</sup> MMWR Dec 12, 2003

<sup>23</sup> MMWR Dec 12, 2003

<sup>24</sup> Mermin et al. *Clin Infect Dis Suppl*, 2004 Apr 15;38 Suppl 3:S253-61

<sup>25</sup> Letter from Public Health Seattle-King County re: reptiles in child care facilities, dated May 9, 2003.

<sup>26</sup> Ostrowski S, Leslie M, Parrott T, Abelt S, Piercy P. B-virus from pet macaque monkeys: An emerging threat in the United States? *Emerging Infectious Diseases* 1998;4(1):117-121.

<sup>27</sup> Ostrowski S, Leslie M, Parrott T, Abelt S, Piercy P. B-virus from pet macaque monkeys: An emerging threat in the United States? *Emerging Infectious Diseases* 1998;4(1):117-121.

causing zoonotic infections in Washington is called Sin Nombre virus. Untreated HPS is fatal in approximately 30 percent of recognized cases. Humans become infected after inhaling dust containing dried rodent urine or feces contaminated with virus. Rarely, bites or scratches from infected rodents can also transmit the virus.<sup>28</sup> Twenty-eight cases of hantavirus infection were reported in Washington between 1994 and July 2004; nine have been fatal.<sup>29</sup> Approximately 14 percent of 1,000 deer mice tested in Washington have been positive for hantavirus,<sup>30</sup> but the prevalence of infection fluctuates in the rodent population seasonally and with population density changes.

#### *Psittacosis*

Psittacosis, also known as parrot fever and ornithosis, is a bacterial infection that can cause severe pneumonia and other serious health problems. It is caused by *Chlamydophila psittaci*, formerly known as *Chlamydia psittaci*. From 1988 through 2002, 923 human cases of psittacosis were reported to CDC, and most resulted from exposure to infected pet birds, usually cockatiels, parakeets, parrots, and macaws. In birds, *C. psittaci* infection is referred to as avian chlamydiosis (AC). Infected birds shed the bacteria through feces and nasal discharges, and humans become infected from exposure to these materials. Symptoms include fever, cough, chills, muscle aches, and atypical pneumonia. Less common complications of the disease include endocarditis, hepatitis, neurologic complications, severe pneumonia, and death. Fewer than 50 human cases are reported each year in the U.S., however it is believed that the number of cases is underreported.

#### *Plague*

Plague is caused by *Yersinia pestis* bacteria that are usually transmitted to humans from infected animals through a vector such as a flea. Direct contact with infected animals may also lead to infection. Several animals including rats, ground squirrels, prairie dogs, and carnivores are susceptible to severe and often fatal infection with plague bacteria. The last reported human case in Washington occurred in 1984 in a hunter who acquired it from a bobcat that he killed and skinned. Coyotes with antibodies to plague are regularly found within the state; this suggests the presence of infection in wild rodents eaten by the coyotes. In addition, field studies have shown that large numbers of rodents in eastern Washington have died from plague. Symptoms of plague include fever, chills, weakness, swollen and painful lymph nodes, and sometimes pneumonia. As the bacteria spread, other parts of the body become affected. Without immediate treatment, the infection can be fatal.

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<sup>28</sup> <http://research.ucsb.edu/connect/pro/disease.html#v8>

<sup>29</sup> [http://www.doh.wa.gov/Publicat/2003\\_News/03-192.htm](http://www.doh.wa.gov/Publicat/2003_News/03-192.htm)

<sup>30</sup> [http://www.doh.wa.gov/Publicat/2003\\_News/03-192.htm](http://www.doh.wa.gov/Publicat/2003_News/03-192.htm)

**DRAFT2 Zoonotics Report 9/30/2004 DRAFT2**

Table 1. Selected List of Zoonotic Diseases

<b>Disease</b>	<b>Animal Reservoir</b>	<b>Mode of Transmission</b>	<b>Human to Human Transmission</b>	<b>Reportable in WA</b>
<b>Hantavirus Pulmonary Syndrome (Sin Nombre virus)</b>	Rodents	Inhalation of dust containing dried rodent urine, excrement, or saliva; rare potential for other modes of transmission e.g. bite	No	Yes
<b>Herpes B Virus</b>	Non-human primates, especially macaques	Bites, scratches, and mucous membrane exposure	Yes, very rare.	Only as a rare disease of public health significance, it is not specifically named on the list
<b>Avian Influenza</b>	Birds	Inhalation of droplets excreted through coughing and sneezing, and contact with bird droppings	Yes. Possibly, if the virus mutates and becomes capable of combining with the human strain of influenza	No, unless recognized as an emerging infection
<b>Monkeypox</b>	Africa rodents	Bites or direct contact with an infectious animal	Yes, but it is much less infectious than smallpox.	Only as a rare disease of public health significance, it is not specifically named on the list
<b>Plague</b>	Wild rodents, especially rats and prairie dogs	Contact/exposure to infected rodents, animals, fleas; pneumonic plague is transmitted via inhalation of respiratory secretions	Yes, especially the pneumonic form	Yes
<b>Psittacosis</b>	Birds	Inhalation of dried feces	No	Yes
<b>Rabies</b>	Bats (primary reservoir in WA), dogs, coyotes, foxes, raccoons, skunks, mongoose. All mammals including humans are susceptible to infection.	Bites, other inoculation of infected saliva or nervous tissue into mucous membranes or open wounds	Rare: Transplants of infected cornea and organs have transmitted rabies	Yes
<b>Salmonella</b>	Animals, humans, and birds; animals most often linked to human infection are chicks, cattle, pigs, sheep, reptiles, amphibians	Contact with feces from an infected source; contact with contaminated surfaces; consuming contaminated food/water ie, eggs, raw milk, produce, meat, poultry	Yes	Yes
<b>Severe Acute Respiratory Syndrome (SARS)</b>	Unknown- suspect the Himalayan Palm civet cat, raccoon dog and probably others	Close person to person contact, inhalation of respiratory droplets, laboratory aerosols, and less commonly animal to human transmission	Yes (very efficient)	Only as a rare disease of public health significance, it is not specifically named on the list
<b>Tularemia</b>	Rabbits, hares, squirrels, muskrats, beaver, sheep, wild rodents, cats, most mammals including humans and NHP are susceptible to infection but do not act as reservoirs	Direct contact with contaminated animal or water, ticks, deer fly, inhalation, ingestion, animal bites	No	Yes

## Public health authority and regulations

### Federal

Section 361 of the Public Health Service (PHS) Act (42 USC 264) authorizes the Health and Human Services (HHS) Secretary to make and enforce regulations necessary to protect public health by preventing the introduction, transmission, or spread of communicable diseases from foreign countries or between states. Under this authority, CDC<sup>31</sup> and the Food and Drug Administration (FDA)<sup>32</sup> have adopted several rules related to the importation, sale, distribution, transport, capture, and release of pet animals.

In June 2003, the CDC and FDA issued a joint order in response to the monkeypox outbreak, which prohibited the importation, transport for interstate commerce, sale, or other commercial or public distribution, or release into the wild of prairie dogs and six species of African rodents. The joint order was replaced by an interim final rule, which was issued under the same authority, in November 2003.<sup>33</sup> The interim final rule created two separate regulations, 21 CFR 1240.63 and 42 CFR 71.56.

The FDA enforces 21 CFR 1240.63, which prohibits inter- and intrastate<sup>34</sup> activities related to capturing, transporting, selling, exchanging, distributing, and releasing prairie dogs, six species of African rodents, and “any other animal so prohibited by order of the Commissioner of Food and Drugs because of that animal’s potential to transmit the monkeypox virus.” The CDC enforces 42 CFR 71.56, which prohibits the importation or offer to import any rodents obtained directly or indirectly from Africa or whose native habitat is Africa and gives the Director of the CDC the authority to issue orders adding animals to the list. Both regulations include exceptions and allow for written requests to receive exemptions. Under their respective rules, both the CDC and FDA can issue quarantine and destruction orders. The FDA may amend or revoke 21 CFR 1240.63 if monkeypox is eradicated in the U.S., but the CDC does not anticipate revoking 42 CFR 71.56.<sup>35</sup>

The CDC banned the importation of Himalayan palm civets in January 2004 in response to evidence that SARS may have been initially transmitted from civets to humans. The importation of civets for scientific, exhibition, or educational purposes is exempt from the embargo as long as the importer receives permission from the CDC in advance. Unlike

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<sup>31</sup> 42 CFR 70.2 authorizes the Director of the CDC to take measures necessary to prevent the spread of communicable diseases between states. 42 CFR 71.32 (b) gives the CDC the authority to place embargoes on international imports.

<sup>32</sup> 21 CFR 1240.30 authorizes Commissioner of Food and Drugs to take measures necessary to prevent the spread of communicable diseases between states.

<sup>33</sup> <http://www.cdc.gov/ncidod/monkeypox/index.htm>

<sup>34</sup> The interim final rule states that the federal government can regulate intrastate transactions as appropriate under the authority granted in Section 361 of the PHS Act (42 U.S.C. 264). The case of the State of Louisiana v Mathews, 427 F. Suppl. 174 (E.D. La 1977), in which the FDA ban on the sale and distribution of small turtles was upheld, is referenced to support this statement. (<http://edocket.access.gpo.gov/2003/03-27557.htm> - p. 15)

<sup>35</sup> <http://fda.gov/OHRMS/DOCKETS/98fr/03-27557.htm>

the situation with African rodents and prairie dogs, no order was issued to limit or prohibit the distribution of civets already in the United States.<sup>36</sup>

In response to outbreaks of avian influenza in Southeast Asia, the CDC invoked its authority again in February 2004 and imposed an embargo on the importation of all birds from eight countries in Southeast Asia.<sup>37</sup> The United States Department of Agriculture (USDA) instituted a similar ban in an effort to protect poultry from the virus.<sup>38</sup> When a highly pathogenic strain of avian influenza appeared in British Columbia, Canada in March 2004, the USDA placed a temporary ban on importing birds and some bird products from British Columbia. However, CDC did not take similar action in this case.

Historically, the FDA and CDC, in response to zoonotic disease concerns, have used their respective authorities to regulate turtles, psittacine birds, molluscan shellfish, and non-human primates. In 1975, the FDA adopted 21 CFR 1240.62, which prohibits the commercial distribution of turtles less than 4 inches in diameter for use as pets. Studies done shortly after this regulation was implemented estimated that over 100,000 cases of salmonellosis among children were prevented each year as a result of this action.<sup>39,40</sup> The FDA also regulates, for the purposes of public health, the interstate transport of psittacine birds and molluscan shellfish (21 CFR 1240.60 and 1240.65).<sup>41</sup>

Regulations adopted by the CDC include 42 CFR 71.52 and 71.53. 42 CFR 71.52 restricts the importation of turtles less than 4 inches and 42 CFR 71.53 prescribes the purposes for which non-human primates may be imported by registered importers.<sup>42</sup> Both of these regulations allow importation of the specified animals for scientific, educational, and exhibition related activities. In addition, the importation of seven or fewer small turtles or viable eggs by an individual is permitted as long as the importation is not in connection with a business. All importers of non-human primates must be registered with the CDC. Importers are required to quarantine non-human primates for 31 days<sup>43</sup> and keep detailed records of any sale or transfer of the animals that occurs within 90 days of importation, including documentation that the recipient of the animal will use it only for the purposes prescribed in 42 CFR 71.53. While not required by the regulation, serial

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<sup>36</sup> [http://www.cdc.gov/ncidod/sars/civet\\_ban\\_exec\\_order.htm](http://www.cdc.gov/ncidod/sars/civet_ban_exec_order.htm)

<sup>37</sup> <http://www.cdc.gov/flu/avian/embargo.htm>

<sup>38</sup> <http://www.usda.gov/Newsroom/0065.04.html>

<sup>39</sup> <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5249a3.htm>

<sup>40</sup> Cohen ML et al. JAMA 1980;243:1247-9

<sup>41</sup> 21CFR1240.60 is aimed at preventing food-borne illnesses. It prohibits the transportation of molluscan shellfish that may be contaminated and therefore contribute to the spread of communicable disease. 21CFR1240.65 prescribes that psittacine birds may not be transported to a state without a health certificate from the destination state when that state requires such a permit.

<sup>42</sup> 42CFR71.53(c) Uses for which nonhuman primates may be imported and distributed. Live nonhuman primates may be imported into the United States and sold, resold, or otherwise distributed only for bona fide scientific, educational, or exhibition purposes. The importation of nonhuman primates for use in breeding colonies is also permitted provided that all offspring will be used only for scientific, educational, or exhibition purposes. The maintenance of nonhuman primates as pets, hobby, or an avocation with occasional display to the general public is not a permissible use.

<sup>43</sup> Centers for Disease Control and Prevention. Tuberculosis in Imported Nonhuman Primates – United States, June 1990-1993. *MMWR* 1993;42(29):572-576.

tuberculosis (TB) testing is routinely conducted during the quarantine period.<sup>44</sup> Table 2 summarizes federal regulations related to the importation or distribution of animals.

The CDC also regulates the importation of domestic dogs and cats (42 CFR 71.51) and the importation and distribution of “any arthropod or other animal host or vector of human disease or any exotic living arthropod or other animal capable of being a host or vector of human disease”(42 CFR 71.54).

The cooperation of several federal and corresponding state agencies is necessary to monitor and enforce these regulations. The FDA and the CDC rely on cooperation from the Animal and Plant Health Inspection Service (APHIS) in the USDA, the Fish and Wildlife Service (FWS) in the Department of the Interior, Customs and Border Protection in the Department of Homeland Security, and the Department of Transportation.<sup>45, 46</sup>

Other federal agencies such as the US Fish and Wildlife Service (FWS) and the USDA make and enforce regulations pursuant to federal laws that are related to the importation, care, sale, and transport of animals. The Endangered Species Act (ESA), the Animal Welfare Act (AWA), the Lacey Act, and the Captive Wildlife Safety Act are referenced in Table 2 as they are particularly relevant to the exotic pet trade. For example, APHIS, a division of the USDA, inspects and licenses exotic animal breeders, dealers, and exhibitors in accordance with the AWA.<sup>47</sup> In addition, laws such as the ESA and the Captive Wildlife Safety Act<sup>48</sup> prohibit (with some exceptions) importing, exporting, transporting, selling, receiving, acquiring, or purchasing specific animals through interstate or foreign commerce. Further, the ESA and regulations adopted pursuant to it require that all wildlife be imported and exported through specific ports (Seattle, WA is one of these ports) and that commercial wildlife importers and exporters be licensed by FWS.<sup>49</sup> These laws do not affect intrastate transactions nor do they prohibit private ownership of the listed animals if they were obtained legally.

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<sup>44</sup> Centers for Disease Control and Prevention. Tuberculosis in Imported Nonhuman Primates – United States, June 1990-1993. *MMWR* 1993;42(29):572-576.

<sup>45</sup> Trust for America’s Health report titled, “Animal-borne epidemics out of control: Threatening the nation’s health,” August 2003

<sup>46</sup> See chart titled “Updated overview of federal agency authorities related to monkeypox” available online at: <http://www.phppo.cdc.gov/od/phlp/docs/Monkeypox%20Overview.5.ppt>.

<sup>47</sup> Most pet shops and other retailers are exempt from USDA/APHIS licensing requirements. However, pet shops and retailers that sell any animal not included on USDA’s list of exempt animals is considered to sell exotic animals and must be licensed.

<sup>48</sup> The Captive Wildlife Safety Act (HR1006) added the definition of prohibited wildlife species (any live species of lion, tiger, leopard, cheetah, jaguar, or cougar or any hybrid of such species) to 16 USC 3371 (The Lacey Act Amendments of 1981) and became public law #108-191 in December 2003.

<sup>49</sup> U.S. Senate Committee on Environment and Public Works hearing on importation of exotic species, July 17, 2003.



Table 2. Federal Regulations

CDC	CFR
CDC has regulations governing importation of the following pets: dog, cats, turtles, tortoises, terrapins, African rodents, non-human primates, and etiologic agents, hosts, and vectors.	42CFR71
<b>Nonhuman Primates</b>	42CFR71.53
<b>Turtles (less than 4 inches)</b>	42CFR71.52
<b>African rodents</b>	42CFR71.56
<b>Dogs and cats</b>	42CFR71.51
<b>Etiologic agents, animal hosts, and vectors</b>	42CFR71.54
FDA	CFR
FDA regulates interstate (and in some cases intrastate) transactions involving turtles, molluscan shellfish, psittacine birds, prairie dogs and African rodents.	21CFR1240
<b>Turtles (less than 4 inches)</b>	21CFR1240.62
<b>Molluscan shellfish</b>	21CFR1240.65
<b>Psittacine birds</b>	21CFR1240.60
<b>Prairie dogs and African rodents</b>	21CFR1240.63
U.S. Fish and Wildlife Service	
The U.S. Fish and Wildlife Service requires permits to import fish, reptiles, spiders, wild birds, rabbits, bears, wild members of the cat family, or other wild or endangered animals. <a href="http://international.fws.gov/permits/permits.html">http://international.fws.gov/permits/permits.html</a>	
The <b>Endangered Species Act</b> (ESA) protects: elephants, polar bears, giant pandas, tigers, species of Psittacine birds (parrots, parakeets, cockatoos, macaws, etc.), and great apes (gorillas, chimpanzees, orangutans, bonobos, and gibbons) among others. The ESA prohibits the taking, importing, or exporting of the listed animals. In addition, it is unlawful to possess, sell, transport, or acquire any animals taken, imported, or exported in violation of the Act.	
<a href="http://endangered.fws.gov/policies/index.html#ESA">http://endangered.fws.gov/policies/index.html#ESA</a>	
The <b>Captive Wildlife Safety Act</b> prohibits, with some exceptions, importing, exporting, transporting, selling, receiving, acquiring, or purchasing through interstate or foreign commerce any live species of lion, tiger, leopard, cheetah, jaguar, or cougar or any hybrid of such species.	
The <b>Lacey Act</b> makes it illegal to import, transport, or sell/trade any illegally acquired wildlife via interstate or international commerce. The Lacey Act also restricts the interstate transport of injurious or potentially injurious wildlife.	
USDA	
Position Statement on Large Wild and Exotic Cats Make Dangerous Pets	
<a href="http://www.aphis.usda.gov/ac/position.html">http://www.aphis.usda.gov/ac/position.html</a>	
The <b>Animal Welfare Act</b> covers the sale and exhibition of wild/exotic animals and the wholesale of pet animals; however, birds, rats, and mice are presently exempted, and dogs, cats and other animals have limited coverage. Cold blooded species, such as reptiles, are not regulated under the Act. Wholesale breeders, dealers, exhibitors and research labs are covered but small retail breeders and pet shops selling only domestic pet animals are not. These are usually covered by local (state, county) anti-cruelty laws and in some instances by local animal regulations or public health laws.	
<a href="http://www.aphis.usda.gov/oa/pubs/awact.html">http://www.aphis.usda.gov/oa/pubs/awact.html</a>	

### **Other States**

States generally have broad authority to take measures necessary to protect public health. This authority is contained within the police powers of the state government. Police powers allow state governments to regulate private interests for the public good. State statutes grant authority to specific government agencies and their administrators to regulate issues concerning the control of communicable diseases. These regulations and policies differ among the states. State level responses during a disease outbreak may vary because of several factors including differences in statutory authority, regulations, perception of risk, available resources, and actions taken by the federal government.

During the monkeypox outbreak, at least 16 states and local jurisdictions took action independent of the federal emergency order.<sup>50</sup> While responses to the outbreak varied, most of these states issued orders prohibiting activities related to the intrastate transport, sale, distribution, or release of African rodents and prairie dogs. Some states (e.g. WI, IL, IN) took action before the CDC and FDA issued their joint order. However, other states did not take action until after the federal order was issued and they became aware of potential problems in their jurisdictions. The new federal interim rule clarifies that, with respect to animals that may carry and transmit monkeypox, the FDA has jurisdiction over inter- and intrastate activities. Similarly, 21 CFR 1240.62, prohibits the commercial distribution of small turtles within and between states.

The states have different regulations concerning the private possession or importation of specific animals. Laws are adopted and enforced by a variety of agencies in different states and the application of regulations (such as license or permit requirements) may differ between states. Because of these differences, it is difficult to categorize states by the type of legislation it has pertaining to exotic animals. A loose classification scheme presented in Table 3 and Appendix A is based on whether or not a state has prohibitions on possessing certain animals or whether or not permits or licenses are required. Twelve states prohibit the private possession of animals such as large cats, wolves, bears, dangerous reptiles such as alligators and crocodiles, and most non-human primates. Seven additional states have less extensive prohibitions on the private possession of exotic or wild animals. Thirty-one states allow private possession of exotic or wild animals but regulate it in some way. For example, 15 states require the owner of a wild or exotic animal to obtain a license or permit and 16 states require a one-time entry permit or health certificate for specific animals being brought in to the state. The purposes and criteria for obtaining permits or licenses in these states may vary. Three states have no regulations pertaining to possession of wild or exotic animals. Table 3 lists each state by the different type of regulation it has. Appendix A contains a more detailed summary of each state's pertinent regulations as of October 2003. The status of specific states on this issue continues to change; for example, Minnesota prohibited the possession of dangerous wild animals as recently as June 2004 and other states are known to be considering similar legislation.

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<sup>50</sup> [www.phppo.cdc.gov/od/phlp/phlegalresponse.asp](http://www.phppo.cdc.gov/od/phlp/phlegalresponse.asp)

Table 3. Summary of State Laws Relating to Private Possession of Exotic Animals<sup>†</sup>

**States with prohibitions:**

Twelve (12) states prohibit the private possession of at least large cats; wolves; bears; dangerous reptiles, such as alligators and crocodiles; and most non-human primates:

Alaska	Hawaii	Tennessee
California	Massachusetts	Utah
Colorado	New Hampshire	Vermont
Georgia	New Mexico	Wyoming

**States with less extensive prohibitions:**

Seven (7) states prohibit the possession of some of the species listed above but allow possession of others:

Connecticut	Maryland	Virginia
Florida	Michigan	
Illinois	Nebraska	

**States allowing possession of exotic animals:**

Fifteen (15) states require the possessor of the wild and exotic animal to obtain a license or permit from the relevant state agency to import and/or privately possess the animal:

Arizona	Montana	Oregon
Delaware	New Jersey	Pennsylvania
Indiana	New York	Rhode Island
Maine	North Dakota	South Dakota
Mississippi	Oklahoma	Texas

Sixteen (16) states have no license requirements for possession, but may regulate some aspect such as requiring a one-time entry permit or health certificate:

Alabama	Louisiana	South Carolina
Arkansas	Minnesota <sup>‡</sup>	<b>Washington</b>
Iowa	Missouri	West Virginia
Idaho	Nevada	Wisconsin
Kansas	North Carolina	
Kentucky	Ohio	

<sup>†</sup>Information regarding state statutes reflects laws in effect as of October 2003.

<sup>‡</sup>Minnesota passed legislation in June 2004 to prohibit the possession of dangerous wild animals.

**Washington: state and local public health authorities and regulations**

In 1991, the Washington State legislature recognized the growing threat of animal-borne diseases and passed legislation granting specific authorities to the Secretary of Health, the State Board of Health (SBOH), and the Director of the Washington State Department of Agriculture (WSDA).<sup>51</sup> The Secretary of Health has specific authority to develop rules, in partnership with the Director of WSDA, for the proposed adoption by SBOH regarding

<sup>51</sup> Chapter 16.70 RCW

the importation, movement, transfer, possession, or sale of pet animals.<sup>52</sup> The Director of WSDA may also adopt rules regarding the issuance of permits for pet animals by WSDA. In case of an emergency involving the outbreak of a communicable disease caused by exposure to or contact with pet animals, the Secretary of Health has the authority to take any reasonable action deemed necessary to protect public health. This includes quarantine and destruction of potentially contagious animals.

The Secretary of Health also has broad authority to “investigate, examine, sample or inspect any article or condition constituting a threat to the public health...”<sup>53</sup> Pending the result of an investigation, the Secretary has specific authority to “issue an order prohibiting the disposition or sale of any ... item involved in the investigation.” However, orders issued under this authority can only be in effect for up to 15 days unless the Secretary takes legal action.<sup>54</sup> Broad authority is also given to SBOH to adopt rules for the prevention and control of infectious and noninfectious diseases.<sup>55</sup>

Authority to protect public health is not limited to state-level officials. Local Health Officers have broad authority to act within their jurisdictions to prevent the spread of communicable diseases.<sup>56</sup> Further, they have the duty to conduct investigations and institute disease control and containment measures including decontamination, isolation, quarantine, vector control, or other measures deemed necessary.<sup>57</sup> The courts have upheld the authority of local public health to act to control the spread of diseases on numerous occasions.<sup>58</sup>

Emergency authorities are another means by which officials can respond to public health threats. When an emergency or other situation requires it, the Secretary of Health can assume the authority of the Local Health Officer in a jurisdiction. The governor has the authority to declare a state of emergency. During a state of emergency, the governor has the authority to prohibit the sale, purchase, or dispensing of specific goods that may endanger life, health, property, or public peace.

SBOH has exercised its broad authority related to adopting rules to control and prevent communicable diseases. Rules adopted under this authority that specifically address diseases associated with animals include WAC 246-100-191, WAC 246-100-201, and Chapter 246-101 WAC.

WAC 246-100-191 prohibits the following activities:

- the sale of products from animals that are infected with anthrax;

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<sup>52</sup> Pet animals are defined in RCW 16.70.020 as “dogs (Canidae), cats (Felidae), monkeys and other similar primates, turtles, psittacine birds, skunks, or any other species of wild or domestic animals sold or retained for the purpose of being kept as a household pet.”

<sup>53</sup> RCW 43.70.170

<sup>54</sup> RCW 43.70.180

<sup>55</sup> RCW 43.20.050 (e)

<sup>56</sup> 70.05.070

<sup>57</sup> WAC 246-100-036

<sup>58</sup> See memo titled “Public Health Emergencies -- Current Legal Authority” from Joyce Roper, AAG to Mary Selecky, Secretary of Health dated January 31, 2002.

- the sale and display of turtles, except as permitted in 21 CFR 1240.62;
- importing skunks, bats, foxes, raccoons, and coyotes without a permit from WSDA;
- and acquiring, selling, bartering, exchanging, giving, purchasing, or trapping for retention as pets or for export any bat, skunk, raccoon, or coyote.

It also specifies actions that local health officers should or can take when dealing with a rabid animal. Updating this WAC to make it consistent with the most recent recommendations from the National Association of State Public Health Veterinarians (NASHPV) on how to prevent rabies<sup>59</sup> should be considered. See Appendix B for a copy of the King County Board of Health's recently adopted rabies rule and a memo comparing the state rule with NASPHV's recommendations.

WAC 246-100-201 regulates selling, trading, transferring, and importing psittacine birds. This rule gives the State Health Officer the authority to order an embargo on shipments of birds into Washington and to take any action necessary to control or prevent a psittacosis outbreak. In addition, it requires a vendor who is transferring a psittacine bird to the general public to provide the consumer with a written warning or caution notice regarding the risk of human infection and signs of illness in an infected bird. The vendor must also post such notice in a public location. Updating this WAC based on recent recommendations from NASPHV<sup>60</sup> should be considered.

Chapter 246-101 WAC requires health care providers, laboratories, and veterinarians to report certain diseases and conditions to public health authorities. The list of reportable conditions includes the following potential animal- or vector-borne diseases: animal bites, anthrax, brucellosis, hantavirus pulmonary syndrome, leptospirosis, lyme disease, malaria, plague, psittacosis, Q-fever, rabies, salmonellosis, tuberculosis, tularemia, other rare diseases, and unexplained critical illness or death. Many of these are required to be reported to public health authorities immediately upon diagnosis. Training health care providers and distributing information on how to recognize zoonotic diseases may help reduce the occurrence of missed or delayed diagnoses.

Certain other SBOH rules regarding communicable diseases are less specific, but may encompass animal-borne diseases.<sup>61</sup> For example, several sections of Chapter 246-100 WAC refer generally to circumstances around communicable diseases. The authorities, duties, and requirements laid out in these sections may be applicable to outbreaks of zoonotic diseases, but further analysis is recommended.

To date, the Secretary of Health and SBOH have not exercised the specific authority granted to them in RCW 16.70.040 to draft and adopt rules regarding importing, moving,

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<sup>59</sup> Centers for Disease Control and Prevention. Compendium of Animal Rabies Prevention and Control, 2004. *MMWR* 2004;53(RR-9):1-6.

<sup>60</sup> National Association of State Public Health Veterinarians. Compendium of measures to control chlamydia psittaci infection among humans (Psittacosis) and birds (Avian Chlamydiosis), 2001.

<sup>61</sup> WAC 246-100-011 (6) defines a "communicable disease" as "an illness caused by an infectious agent which can be transmitted from one person, animal, or object to another person by direct or indirect means including transmission via an intermediate host or vector, food, water, or air."

selling, transferring, or possessing pet animals. RCW 16.70.040 serves as the statutory authority for the WSDA rule (WAC 16-54-125) that allows WSDA to issue permits, in consultation with the DOH, to entities that are importing skunks, bats, raccoons, coyotes, and foxes.

Other state agencies have authorities related to animal health and they administer regulations related to possessing, selling, capturing, or importing animals and having animals in day care facilities. WSDA and the Washington Department of Fish and Wildlife (WDFW) have regulations concerning importing, possessing, or transporting some species of exotic or wild animals. For example, WSDA requires that all captive wild and exotic animals entering the state obtain an official interstate health certificate or certificate of veterinary inspection in their state of origin.<sup>62</sup> The Director of WSDA, the State Veterinarian, or a deputized State Veterinarian has the authority to act when notified of the presence or probable danger of infection from any animal disease.<sup>63</sup> In addition, the director of WSDA has quarantine and destruction authorities to protect the state's animal population.<sup>64</sup> RCW 16.36.082 makes it illegal to knowingly transfer or expose other animals to animals with a communicable disease. WDFW regulates the taking, importation, possession, transfer, and holding in captivity of native wild animals.<sup>65</sup> WDFW also prohibits the importation of certain deleterious exotic wildlife. Mammals on the list include mongoose, wild boar, collared peccary, certain goats and other bovidae, and many cervides such as fallow deer, reindeer, and red deer. Certain fish, one frog, one species of swan, and zebra mussels are also prohibited. A list of prohibited species is available in Appendix C. These statutes and regulations are primarily aimed at protecting agricultural resources, native species, or the environment.

The Department of Social and Human Services (DSHS) enforces regulations regarding the presence of animals in day care facilities. WAC 388-295-5170 aims to protect children from potential health risks associated with contact with animals by setting hygiene, housing, and handling standards for reptiles and other animals in daycare facilities. Children less than five years of age are prohibited from handling reptiles and amphibians. DOH recommends that all reptiles and amphibians be prohibited from day care facilities.

Several local jurisdictions have ordinances regarding 'exotic', 'wild' or 'dangerous' animals. Local ordinances vary widely with respect to restrictions, licensing requirements, and safety and health measures. Some counties and cities have ordinances that prohibit the possession of 'dangerous', 'wild', or 'exotic' animals or require that owners license these types of pets; other jurisdictions have no such ordinances. The definition of 'dangerous', 'wild', or 'exotic' animal differs among the many ordinances, although most of them include at least non-domestic felines and canines, bears, snakes, and crocodiles. A selected sample of local ordinances is provided in Appendix D.

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<sup>62</sup> WAC 16-54-035

<sup>63</sup> RCW 16.36.070

<sup>64</sup> RCW 16.36.090

<sup>65</sup> WAC 232-12-064

In addition to its regulatory role, DOH participates in non-regulatory programs aimed at reducing, preventing, or controlling zoonotic diseases. DOH created the Zoonotic Disease (ZD) Program within the Environmental Health division in 1996. The ZD Program provides technical assistance, training, consultation, education, and support on topics such as zoonotic and vector-borne disease sources, transmission, epidemiology, surveillance, prevention, and control. The program also generates, obtains, maintains, summarizes, and distributes non-human surveillance data for zoonotic and vector-borne diseases; conducts field investigations of zoonotic and vector-borne disease cases/outbreaks; and aims to create and maintain relationships with a diverse group of partners. Collaborators and recipients of services include state and federal agencies, veterinarians, health care providers, wildlife rehabilitators, animal control agencies, mosquito control districts, the military, pest control and other private industry, academia, the media, the Washington Animal Disease Diagnostic Laboratory, and the Washington State University College of Veterinary Medicine.

Actions taken by the State Legislature in recent years demonstrate that the legislature has an interest in preventing zoonotic diseases and preserving public safety. In the midst of economic challenges, budget shortfalls, and program cuts, the legislature granted DOH a budget enhancement in order to supplement its zoonotic disease programs. In addition, during the 2001-2002 and 2003-2004 biennium sessions, the legislature considered, but did not to pass, bills related to possessing dangerous wild animals.<sup>66</sup>

## **Findings**

### **Exotic pets in Washington**

#### **Survey results**

In the summer of 2004, we asked local Environmental Health Directors or their designees from 34 local health jurisdictions (LHJ) to complete an on-line survey regarding exotic pets. A copy of the survey is provided in Appendix E. The survey aimed to assess the degree to which exotic pets are reported to be involved in injuries, disease transmission, or environmentally hazardous situations and the degree to which they are bred and traded or sold. From this information, we hoped to get a sense of how widespread the exotic pet trade is within the state and to assess the potential health risks associated with exotic pets.

Representatives from 21 (62 percent) LHJs responded to the on-line survey. The responses appear to be a representative sample and reflect adequately local public health's experiences throughout the state. The results are summarized in Table 4. Local public health departments do not receive a large number of reports related to exotic pets. For example, only 24 percent of respondents from LHJs reported receiving four or more reports of bites, scratches, or other injuries inflicted by exotic animals in a five-year period. Further, responses to the survey suggest that public health officials would not necessarily be aware of exotic pet owners, breeders, or dealers residing within their jurisdictions. Forty eight percent of respondents from LHJs indicated that they were aware of three or fewer exotic pet breeders or dealers in their jurisdictions; an additional

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<sup>66</sup> HB1725, HB2675, SB5729, HB1151

47 percent reported not knowing the number of exotic pet breeders or dealers in their jurisdictions. This lack of awareness among public health officials may be problematic in the event that a disease outbreak occurred and public health personnel needed to communicate with pet owners or distributors. In fact, this was a barrier during the monkeypox outbreak when public health officials needed to identify and contact prairie dog owners and dealers.

Three respondents indicated that they received reports of injuries or problems related to exotic pets and noted that the following animals were the focus of these reports: snakes, iguanas, psittacine birds, non-human primates, prairie dogs, moose, bats, raccoons, degu, mountain beaver, and wolf-dog hybrids. The survey did not capture the exact circumstances related to each animal and the injury. The LHJ respondents were asked to provide contact information for individuals that could potentially provide additional information. We used this information to contact animal control officers in nine counties and asked them the same questions. Eight of the nine respondents were from counties in which local public health personnel also responded to the survey. It appears that animal control officers may receive more reports of injuries inflicted by exotic pets or other problems, but overall, animal control also receives few complaints involving exotic pets. All nine animal control officers surveyed indicated that they were aware of exotic pet breeders or dealers in the communities they serve.

Table 4. Summary of Survey of LHJ and Animal Control Officers

**% Reporting Receiving 0- 3 Reports Related to Exotic Pets in a 5-year Period**

	Local Health (n=21)	Animal Control (n=9)
Bites/scratches/injuries	76%	33%
Loose animals/noise/odor	90%	56%
Disease transmission to humans	86%	78%
Exotic animals in schools/other places accessible by children	81%	89%
Neighbors' exotic pets/safety concerns	95%	56%
Other	95%	78%

**% Reporting Receiving 4 or More Reports Related to Exotic Pets in a 5-year Period**

	Local Health (n=21)	Animal Control (n=9)
Bites/scratches/injuries	24%	67%
Loose animals/noise/odor	10%	44%
Disease transmission to humans	14%	22%
Exotic animals in schools/other places accessible by children	19%	11%
Neighbors' exotic pets/safety concerns	5%	44%
Other	5%	22%

**% Reporting Having Knowledge of Exotic Pet Breeders/Dealers**

	Local Health (n=21)	Animal Control (n=9)
Not Known	48% (10)	0% (0)
Knowledge of 0 - 3 Exotic Pet Breeders/Dealers	48%(10)	44% (4)
Knowledge of 4 or More Exotic Pet Breeders/Dealers	4% (1)	56% (5)



### **The exotic pet trade**

A survey conducted by the American Veterinary Medical Association (AVMA) in 2001<sup>67</sup> estimated that 13.1 percent of U.S. households own specialty and exotic pets.<sup>68</sup> The five most common types of exotic pets are fish, rabbits, other types, guinea pigs, and turtles. The Pet Industry Joint Advisory Council reports that 64 million American households own companion animals, 20 million of which have at least one exotic pet.<sup>69</sup> According to the U.S. Fish and Wildlife Service, more than 250 million individual animals were imported in to the U.S. in 2002; the single largest group of imported animals was tropical fish, followed by amphibians.<sup>70</sup> These statistics shed some light on the scope of the exotic animal trade within the U.S., but the exact number and type of exotic pets and breeders, dealers, and owners in Washington State is difficult to determine. Resources such as lists of recipients of USDA licenses, Internet directories, classified advertisements, WSDA, and exotic pet owners' organizations helped us estimate the scope of the exotic pet trade within the state.

The USDA issues licenses to animal dealers, breeders, and exhibitors under the authority of the AWA.<sup>71</sup> Licenses are contingent upon inspections that determine if facilities and practices meet specific standards of care. Individuals or businesses that deal only with birds, reptiles, fish, amphibians, rats, or mice are not regulated under the AWA; therefore breeders and dealers of these animals are not licensed or registered with the USDA. Breeders, dealers, transporters, and exhibitors of other exotic animals are required to be licensed by the USDA and undergo periodic inspections. Private owners who do not breed, sell, or exhibit animals are not regulated. Presently, there are 16 licensed animal breeders, nine licensed dealers, 34 licensed exhibitors, and four licensed animal carriers in Washington.<sup>72</sup> The number of licensees fluctuates and not all of the licensees deal in exotic animals. Among the ones that advertise exotic species, animals in their possession include: degus, chinchillas, short-tailed opossums, Patagonian caviars, hedgehogs, wallaroos, zebras, yaks, Bactrian camels, Nilgai antelopes, watussis, sugargliders, bobcats, lynx, cougars, servals, nonhuman primates, and a wide variety of imported fish, reptiles, birds, amphibians, rodents, and invertebrates.<sup>73</sup> With the exception of some local jurisdictions, the possession or sale of animals is unregulated in Washington, thus many different species are bred, sold, exhibited, and owned throughout the state.

Another list of animal breeders and dealers was obtained from an Internet and directory search. This search yielded 35 animal breeders and dealers that advertised exotic animals.

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<sup>67</sup> American Veterinary Medical Association. *U.S. Pet Ownership and Demographics Sourcebook*. American Veterinary Medical Association, 2002.

<sup>68</sup> Specialty and exotic pets were defined in the survey as: fish, ferrets, rabbits, hamsters, guinea pigs, gerbils, other rodents, turtles, snakes, lizards, other reptiles, other birds (pigeons and poultry), livestock, and all other types of specialty and exotic animals that are kept as pets.

<sup>69</sup> U.S. Senate Committee on Environment and Public Works hearing on importation of exotic species, July 17, 2003.

<sup>70</sup> U.S. Senate Committee on Environment and Public Works hearing on importation of exotic species, July 17, 2003.

<sup>71</sup> <http://www.aphis.usda.gov/ac/awlicreg.html>

<sup>72</sup> <http://www.aphis.usda.gov/ac/lists/lista.pdf>

<sup>73</sup> These Web sites contain lists of animals at some of the dealers and exhibitors in WA:

<http://www.anw.net/>, <http://www.schreinerfarms.com/>, and <http://www.smileyscritters.com/animals.html>,

Many of these specialize in birds and/or reptiles and therefore are not regulated under the AWA. However, some of these businesses appear to deal in animals that are regulated under the AWA, but they do not appear on the list of USDA licensed breeders, dealers, or exhibitors. It is possible that they meet some other exemption criteria, but this is not known for certain. These breeders, dealers, and/or exhibitors advertise animals such as mini zebus, miniature donkeys, llamas, Bactrian camels, wallaroos, pixie bobcats, exotic birds, lynx, servals, caracals, Bengal tigers, chinchillas, ocelots, hedgehogs, sugargliders, and Brazilian short-tailed opossums.

Individuals or businesses based in Washington posted twenty-two messages advertising exotic pets on one Web site between November 2003 and May 2004. Thirteen of these were 'wanted' ads in which people requested specific animals, eight advertised animals for sale, and one was a request to share the costs of shipping hedgehogs to Washington from Kansas. Three of the advertisements involved businesses that were USDA licensed, four of the ads selling animals were placed by individuals who were selling their pets, and it was not clear from the other four if the seller was an individual selling his/her pets or if it was a business. Animals for sale in these ads included sugargliders, degus, Brazilian short-tailed opossums, chinchillas, hedgehogs, and a Bennett wallaby.<sup>74</sup>

Several exotic animal dealers offer animals for sale over the Internet, many of these arrange to ship animals as needed to buyers. In some cases, the businesses indicate that they cannot ship animals to certain states because of legal restrictions in those states. The businesses also encourage buyers to research the legality of owning certain animals in the city, county, and state where they live. Unfortunately, these types of practices are not universal and some illegal sales and importations still occur. Further, as illustrated in a letter received by DOH concerning an ill snake, sick animals might be shipped in to the state unbeknownst to the shipping company or the consumer.<sup>75</sup> While this scenario is probably rare, it highlights several vulnerabilities created by the Internet sale of exotic pets.

WSDA regulates the importation of exotic and captive wild animals into Washington. The law (WAC 16-54-035) requires that importers submit a health certificate for all captive wild and/or exotic animals being brought into the state. Upon receipt of the health certificate, WSDA determines if the importer is eligible to receive an entry permit that is valid for 30 days. In 2003, WSDA issued 106 entry permits for exotic animals; some of these permits were issued for shipments between zoos. WSDA does not license or monitor the animals after they enter the state. Personnel at WSDA note that it is very likely that some people are not aware of this requirement and have imported exotic animals without receiving a permit. Failure to get a permit is a gross misdemeanor. A separate state agency, WDFW, prohibits the importation of certain injurious species (see

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<sup>74</sup> <http://www.hoobly.com/browse/12042-65-0.html>

<sup>75</sup> Account taken from an email sent to DOH by a Washington state resident describing an incident in which a snake was shipped from Florida to a minor in Washington via FedEx without notifying the carrier of the package's contents. Consequently, the snake was subjected to inhumane conditions. The snake was received in poor health and subsequently diagnosed with a severe *Salmonella* infection.

Appendix C). WDFW depends on reports of violations to enforce these prohibitions, as there is no active inspection or border control program.

The Phoenix Exotic Wildlife Association, a national organization of exotic pet owners based in Washington State, promotes responsible, legal, and ethical ownership of exotic pets. The organization emphasizes education and safety and works to protect rights to private ownership of exotic pets. Approximately 52,000 people that receive information or contact the organization live in Washington. Most of these represent private pet owners that are probably not accounted for by the USDA lists or the directory search for dealers/breeders. The individuals could represent approximately 100,000 or more animals including spiders and other invertebrates, reptiles, amphibians, birds, rodents, non-human primates, and large cats. The organization's president noted that "swap meets" and other informal animal exchange programs are not common in Washington, but private ownership of exotic animals is common. The organization opposes prohibitions on private ownership of exotic animals but would consider supporting regulations or non-regulatory programs to promote informed, responsible exotic pet ownership. For example, the Association's President felt that most members of the organization would support mandatory point of sale education regarding reptiles and the risk of salmonellosis.

### **Position statements**

Various position statements regarding private ownership of exotic animals reflect the disparate opinions of animal rights activists, exotic pet owners, veterinarians, government agencies, public health, and other interested parties. They reflect diverse perspectives and demonstrate that exotic pet ownership is a multi-faceted issue comprised of disparate opinions on a variety of concerns such as animal welfare, wildlife conservation, and public safety. Several animal welfare organizations, professional and veterinary groups, and federal agencies have published position statements opposing keeping wild or exotic animals as pets.<sup>76</sup> Statements from organizations whose membership consists mainly of exotic animal owners reflect their opposition to restrictions on private ownership of exotic animals.<sup>77</sup>

The American Veterinary Medical Association<sup>78</sup>, The Council of State and Territorial Epidemiologists (CSTE)<sup>79</sup>, The National Association of State Public Health Veterinarians (NASPHV), The Humane Society of the United States<sup>80</sup>, and The Association of Wildlife Veterinarians are among those that oppose private ownership or support some restrictions on private ownership of exotic wild animals. They maintain that wild or exotic animals

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<sup>76</sup> Position statements from The American Animal Hospital Association, The American Association of Zoological Parks and Aquariums, The Animal Protection Institute, The Progressive Animal Welfare Society, The Smithsonian National Museum of Natural History Division of Amphibians and Reptiles, are available through the Captive Wild Animal Protection Coalition Web site:

<http://cwapc.org/news/statements.html>.

<sup>77</sup> Phoenix Exotic Wildlife Association position statement: <http://www.phoenixexotics.org/position.htm> and the National Alternative Pet Association position statement: <http://www.altpet.net/badlaw.html>.

<sup>78</sup> <http://www.avma.org/noah/members/policy/polwild.asp>

<sup>79</sup> <http://www.cste.org/ps/1998/1998-id-17.htm>

<sup>80</sup> <http://www.hsus.org/ace/15548>

are not suited for domesticated lifestyles, that there present serious public health and safety issues, and that the management of captive exotic animals requires resources, knowledge, and environmental conditions that most private owners cannot adequately provide.

Those that support exotic pet ownership contend that they are contributing to the welfare of their animals, helping to preserve endangered species, and helping to establish legitimacy in the trade by providing captive bred animals to those who might otherwise seek wild-caught exotic species. In addition, they suggest that laws prohibiting the possession of exotic animals alienate individuals who keep these animals and prevent them from seeking proper veterinary care or contacting authorities if there is a problem.

### **Recommendations of other agencies and organizations**

NASPHV and CSTE have issued recommendations aimed at preventing or reducing the risk of rabies,<sup>81</sup> reptile-associated salmonellosis,<sup>82, 83</sup> and enteric diseases from animals in public settings.<sup>84, 85</sup> These recommendations include:

- Enacting legislation requiring point of sale education to consumers purchasing reptiles and amphibians;
- Prohibiting reptiles and amphibians in child care facilities;
- Prohibiting the importation of wild animals such as skunks, raccoons, coyotes, foxes, and bats; and
- Promoting good sanitation practices at petting zoos and fairs such as hand washing and restrictions on where food and beverages are allowed.

Several organizations and governmental agencies recommend a complete prohibition on the private ownership of non-human primates, non-domesticated canines and felines, bears, and some reptiles because these animals are considered especially dangerous. USDA issued a statement noting that large wild and exotic cats are not appropriate pets and the agency recommends that only qualified, trained professionals should care for and handle these types of animals.<sup>86</sup> CDC states that the risk of transmission of herpes B-virus associated with nonhuman primates makes them unsuitable as pets.<sup>87</sup> In a separate document titled, "Importation and Exportation Restrictions on Exotic and Native Wildlife with Potential Adverse Impact on Public Health," CDC, NASPHV, and CSTE issued

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<sup>81</sup> Centers for Disease Control and Prevention. Compendium of Animal Rabies Prevention and Control, 2004. *MMWR* 2004;53(RR-9):1-6.

<sup>82</sup> Centers for Disease Control and Prevention. Reptile-Associated Salmonellosis – Selected States 1998-2002. *MMWR* 2003;52(49):1206-1209.

<sup>83</sup> Centers for Disease Control and Prevention. Reptile-Associated Salmonellosis – Selected States 1996-1998. *MMWR* 1999;48(44):1009-1012.

<sup>84</sup> Centers for Disease Control and Prevention. Outbreaks of Escheria coli O157:H7 Infections Among Children Associated with Farm Visits – Pennsylvania and Washington. *MMWR* 2001;50(15):293-297.

<sup>85</sup> National Association of State Public Health Veterinarians. Compendium of Measures to Prevent Disease and Injury Associated with Animals in Public Settings, 2003.

<sup>86</sup> <http://www.aphis.usda.gov/ac/position.pdf>

<sup>87</sup> Ostrowski S, Leslie M, Parrott T, Abelt S, Piercy P. B-virus from pet macaque monkeys: An emerging threat in the United States? *Emerging Infectious Diseases* 1998;4(1):117-121.

recommendations for federal-level actions regarding importing and exporting exotic species (see Appendix F).

## **Government regulations**

### **Federal Government**

Our review of federal level authorities and regulations related to pet animals found that the federal government has the authority prevent to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the US or between states. One way that this authority is exercised is by regulating importation as well as interstate, and, in some cases, intrastate issues related to the transport, sale, trade, and distribution of pet animals. CDC and FDA exercise this authority through several separate regulations and/or temporary orders that pertain to a limited number of species. At least one general regulation exists prohibiting the importation and distribution of “animals, vectors, and etiologic agents that could carry diseases transmissible to humans” (42CFR71.54). Several disease and/or animal specific regulations also exist. Two of these (21CFR1240.63 and 21CFR1240.62) specifically regulate intrastate activities involving African rodents, prairie dogs, and small turtles. A study found that prohibiting the sale of small turtles prevented approximately 100,000 cases of salmonellosis among children each year. The effectiveness of the order to cease the sale, trade, and distribution of prairie dogs and African rodents has not been evaluated, but this action probably aided in stopping the spread of monkeypox in the summer of 2003. Further, the effectiveness of other regulations concerning pet animals has also not been directly assessed. While it is likely that the enforcement of these regulations is somewhat effective in preventing or reducing the risk of some zoonotic diseases, they are not comprehensive enough to prevent the introduction and spread of all zoonotic diseases. There are no federal regulations that comprehensively address importing and distributing exotic animals and their impact on public health and program activities and enforcement capability for existing rules are limited. For example, despite the federal ban on selling small turtles, it is common to find them for sale in public venues.

Federal laws such as the AWA, the ESA, the Captive Wildlife Protection Act, and the Lacey Act prohibit or regulate certain activities but do not limit private ownership of the protected animals as long as they were obtained legally. It is often difficult to prove wrongdoing or trace the origin of an animal once it is in private possession. These laws do little to protect public health as they are primarily designed to address other issues such as animal welfare or native habitat and species protection.

### **State Government**

State officials have the authority and the responsibility to take measures within their own states to prevent the spread of communicable diseases. We found that the approaches taken by states to prevent the introduction and spread of zoonotic diseases vary. Many of the state statutes related to importing or possessing exotic or wild animals address issues related to human safety, animal welfare, or environmental protection but do not specifically address public health and communicable diseases. Even though these issues are closely related in many cases, the intent of the laws and the agencies that have the

authority to make and enforce them are important considerations because of limits in legal authority or capacity to address human health issues.

In Washington State, the Secretary of Health, Board of Health, and the Director of the Department of Agriculture have specific authority to write rules addressing the importation, movement, sale, transfer, or possession of pet animals. Further, the Secretary of Health has the authority to act during an emergency resulting from an outbreak of a communicable disease associated with contact with pet animals. 'Pet animals' is broadly defined in the statute, and includes dogs, cats, monkeys and other similar primates, turtles, psittacine birds, skunks, or any other species of wild or domestic animals sold or retained for the purpose of being kept as a household pet. In addition to this specific authority, SBOH, the Secretary of Health, and state and local health officers have general authorities related to the prevention and control of communicable diseases. Some of these authorities are exercised through regulations that prohibit or otherwise regulate the importation of certain species and require that health care providers and veterinarians report certain diseases. Other state agencies and local governments also have authority to act in the case of a disease outbreak in animals or to regulate issues related to animal importation, sale, distribution, capture, ownership, or health. With the exception of the DSHS regulation (WAC 388-295-5170) regarding animals in day care facilities, most of these statutes and regulations are intended to protect agricultural resources, native species, or animal welfare. The intent of these measures complements the goals of public health, however they do not fully encompass the purpose and responsibility of public health to prevent and control communicable diseases among people.

We also found that captured native wildlife and animals in petting zoos, fairs, or swap meets can be sources of infection. In particular, these animals can carry rabies, E. coli, monkeypox, *Salmonella*, and many other zoonoses. State regulations aim to reduce the risk of rabies for humans by making it illegal to acquire, sell, barter, exchange, give, purchase, or trap bats, skunks, foxes, raccoons, and coyotes for the purpose of keeping these animals as pets (WAC 246-100-191). The capturing and keeping of other wild animals is dictated by WDFW and local ordinances, which vary from county to county. Local ordinances also regulate requirements for rabies vaccinations and licensing for pet animals. The most recent *Compendium of Animal Rabies Prevention and Control*<sup>88</sup> recommends that consideration be given to vaccinating livestock that have frequent contact with the public against rabies. With regard to preventing salmonellosis, the *Compendium of Measures To Prevent Disease and Injury associated with Animals in Public Settings, 2003* recommends specific actions. Washington is one of only a few states that have developed specific guidelines for petting zoo exhibitors and other animal exhibition venues.<sup>89,90</sup>

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<sup>88</sup> Centers for Disease Control and Prevention. *Compendium of Animal Rabies Prevention and Control*, 2004. *MMWR* 2004;53(RR-9);1-6.

<sup>89</sup> National Association of State Public Health Veterinarians (NASPHV). *Compendium of Measures To Prevent Disease and Injury associated with Animals in Public Settings*, 2003.

<sup>90</sup> Washington State Department of Health Office of Environmental Health and Safety. *Recommendations to reduce the risk of disease transmission from animals to humans at petting zoos, fairs, and other animal exhibits*, 2001. At: [www.doh.wa.gov/ehp/ts/Zoo/PettingZooHealthGuide.pdf](http://www.doh.wa.gov/ehp/ts/Zoo/PettingZooHealthGuide.pdf)

Further, evidence suggests that a lucrative and largely unregulated trade in imported exotic wildlife is thriving in the United States. This trade occurs both within and among states and is facilitated by the Internet. The exotic animal trade poses a risk of introducing and disseminating zoonotic pathogens. These pathogens threaten both human and animal health and have the potential to become established and maintained in native animal and insect reservoirs. Health department and animal control officials are often consulted following animal bites and other exposures. Assessment of these exposures requires special attention due to the potential for rare and fatal zoonoses, severe injuries, and serious wound-related infections.

With these concerns in mind, DOH and local health jurisdictions expend substantial resources to reduce the risk of and prevent zoonotic diseases. State and local health officials respond to incidents involving potential and/or actual human exposures to zoonotic diseases, initiate education campaigns, and strive to build relationships with organizations and agencies affected by related issues. The survey we conducted indicated that Washington State has not experienced a significant public health problem related to exotic pets. However, as events in other states and around the world remind us, prevention, surveillance, and preparation are important.

## **Conclusions and Recommendations**

### **Conclusions**

The following conclusions are based on the information presented in this report.

- *Regulating the exotic animal trade and responding to zoonotic disease outbreaks when they occur involve the cooperation of several different federal, state, and local agencies.*

In the wake of the monkey pox outbreak, federal agencies and others initiated or recommended efforts to evaluate existing federal laws in the context of the exotic animal pet trade and its impact on public health. These processes are examining the complex networks of agencies, laws, and private enterprises that are involved in the regulation, importation, transport, selling, and owning of exotic animals. There is a possibility that recommendations for changes in the federal system will be brought forth and implemented. It is important for the roles and responsibilities of local, state, and federal agencies to be clear and to be structured in a way that promotes cooperation and communication. Groups such as NASPHV and CSTE are bringing forth recommendations and representing states' perspectives on these issues.

- *Many existing laws related to exotic or wild animals are not primarily designed to protect public health and prevent communicable diseases.*

Laws designed to protect endangered species, promote animal welfare standards, or protect agriculture and the natural environment from invasive or harmful species are enforced by various agencies. However, the primary purpose of these laws is not to

protect public health or prevent human disease. Therefore public health should not rely on the existence of these laws. The authority of public health agencies should be exercised independently and in cooperation with other regulatory agencies to ensure that disease prevention and control is a priority.

- *Federal laws aimed at protecting public health and safety focus on foreign imports and interstate activities. Only two federal laws regulate intrastate activities and those pertain only to African rodents, prairie dogs, and small turtles.*

Limited federal jurisdiction over intrastate activities requires that states maintain robust laws pertaining to activities conducted within their borders. States may also need to be prepared to monitor compliance with federal laws in the absence of active federal oversight.

- *The exotic animal trade is experiencing increasing volumes every year. The rapid movement and distribution of imported exotic and captured wild animals increases the risk that a zoonotic disease will be introduced to a new population, threaten human and animal health, and become established in native animal and insect reservoirs.*

Increasing numbers of exotic pets are imported to the U.S. each year and are an important factor in the introduction of zoonotic diseases. The rapidity and means by which zoonotic diseases can be introduced to the U.S. has led policymakers to ask if different ways of dealing with the threat of zoonotic diseases are necessary. In light of more public demand for exotic species and the widespread availability of these animals, public health must develop proactive ways to monitor and regulate the exotic pet trade to prevent human diseases.

With respect to the monkeypox outbreak, there was a two-week period between the date when the first patient presented to her doctor and the time that local public health authorities were notified. An additional week passed before the CDC and FDA issued their joint order.<sup>91</sup> This lag time, which was likely due to the complex assessment and diagnosis required by this disease, represents a gap in the public health infrastructure that could have been, under other circumstances, even more critical. While the public health mobilization during the monkeypox outbreak was swift and successful (complete containment of the outbreak was achieved in less than a month), a more virulent disease might have presented a bigger challenge if it had been given a three-week head start. In the case of monkeypox, the most time consuming aspect was probably the initial diagnosis, suggesting that more attention should be given to educating health care providers regarding the risks and presentations of zoonotic diseases. Another factor that contributed to the spread of monkeypox was the rapid and widespread distribution of captured wild animals to distributors and consumers. This distribution occurred before a problem was even recognized. Longer holding and observation periods before mass

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<sup>91</sup> Trust for Health report titled, "Animal-borne epidemics out of control: threatening the nation's health," August 2003.



distribution of imported exotic or captured wild animals may help identify infected animals before they are widely distributed.

- *The extent of exotic pet ownership within the state is difficult to assess accurately; some sources suggest that it is common. Local public health departments and animal control officers do not receive many reports of problems associated with exotic pets. Animal control officers might have more knowledge of exotic pet breeders/dealers on average than local health departments.*

Determining the number and types of exotic animals in the state is difficult. Most jurisdictions do not require that pets other than domesticated dogs and/or cats be licensed, therefore no official records of ownership exist for other types of animals. Considering that there are limited statewide restrictions on animal ownership, there are probably many different species of animals in private possession throughout the state. Having knowledge of concentrated populations of exotic animal species such as those held by breeders or dealers is important and local public health departments should be aware of and able to contact the people involved in these activities during an emergency situation.

- *Washington's laws to prevent rabies and psittacosis are not up to date with current national recommendations and available information.*

NASPHV recently published two separate compendiums<sup>92,93</sup> regarding preventing human cases of rabies and psittacosis. Changes to WAC 246-100-191 and WAC 246-100-201 should be considered in light of these recommendations.

- *Public health in Washington has both specific and broad authority to prevent, manage, and act in the event of a zoonotic disease outbreak related to exotic pet animals. Within the parameters of these authorities, public health officials can be both reactive and proactive. The authorities granted to state and local health officials appear to be adequate for dealing with a zoonotic disease outbreak, however a clear plan and a process for executing it are needed.*

State law gives the Secretary of Health the authority to take appropriate action in the event of a disease outbreak associated with pet animals. Further, the State Board of Health can adopt rules developed by the Secretary of Health and the Director of the Department of Agriculture that are related to importing, transferring, possessing, or selling pet animals. This authority gives public health officials the latitude to develop rules aimed at preventing or reducing the risk of zoonotic diseases. To date, this specific authority has not been exercised but SBOH has adopted related rules under its broad authority to control and prevent communicable diseases.

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<sup>92</sup> Compendium of Animal Rabies Prevention and Control, 2004. *MMWR* 2004;53(RR-9):1-6.

<sup>93</sup> National Association of State Public Health Veterinarians. Compendium of measures to control chlamydia psittaci infection among humans (Psittacosis) and birds (Avian Chlamydiosis), 2001.

## **Recommendations**

The work group considered several policy options addressing exotic pets and zoonotic diseases.<sup>94</sup> The work group unanimously adopted the following recommendations, which offer ways that public health can use its authority, influence, and current capacity to prevent, manage, and reduce the risk of zoonotic disease outbreaks associated with exotic pet animals.

### **Recommendation 1: Develop a zoonotic disease response plan**

The Environmental Health division of DOH, in consultation with Communicable Disease Epidemiology program, should work with interested parties including other state agencies, local health jurisdictions, private organizations, research institutions, health care providers, and veterinarians to develop a zoonotic disease response plan. The plan should include a working definition of ‘exotic pets,’ a review of authorities and responsibilities, principles of disease containment, and reporting requirements and standards. The plan can also be used to outline and propose preventive measures, surveillance systems, and early warning processes. A benefit to developing a response plan is that it can be a dynamic resource that can be readily changed as circumstances require. The state’s Communicable Disease Response Plan could be used as a model and the possibility of combining the documents and creating a zoonotic component within the Communicable Disease Response Plan should be considered.

### **Recommendation 2: Revise existing rules on rabies and psittacosis**

WAC 246-100-191 and WAC 246-100-201 lay out measures to prevent and control human cases of rabies and psittacosis respectively. Rabies<sup>95</sup> (2004) and psittacosis<sup>96</sup> (2001) have been the subject of recent compendiums published by NASPHV. The state rules should be reviewed in the context of these recommendations and changes should be considered. The King County Board of Health adopted a rabies rule in May 2004 that might be used as a model for the state (see Appendix B-1).

### **Recommendation 3: Give further consideration to adopting a point of sale education requirement for all reptile sales**

Responsible reptile handling and hygiene practices should be promoted to reduce the risk of reptile-associated salmonellosis. We recommend that DOH and SBOH explore options such as adopting a point of sale education requirement for retailers of reptiles. Other options may also exist and the efficacy of these should be examined and compared to

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<sup>94</sup> Among the options that were not adopted by the work group were: prohibitions on importing, possessing, or selling specific animals; requiring registration and/or licensing for exotic pets; and regulating exotic pets in public places. These options were not carried forward for various reasons. For example, the research we conducted did not suggest that a statewide prohibition on the importation, possession, or sale of additional animals would provide a significant public health benefit at this time. With respect to registration and licensing requirements, the work group concluded that this issue is best approached by local jurisdictions. We felt that more information on the impact of exotic pets in public places was necessary before making a recommendation on the issue. If new information becomes available, this action should be considered.

<sup>95</sup> Centers for Disease Control and Prevention. Compendium of Animal Rabies Prevention and Control, 2004. *MMWR* 2004;53(RR-9):1-6.

<sup>96</sup> National Association of State Public Health Veterinarians. Compendium of measures to control chlamydia psittaci infection among humans (Psittacosis) and birds (Avian Chlamydiosis), 2001.

point of sale education programs. The Environmental Health division of DOH should convene a task force to do further study on this issue. It may be appropriate to conduct this evaluation in the context of the rule revisions discussed in Recommendation #2.

**Recommendation 4: Monitor the situation and periodically reevaluate whether additional regulation is needed:**

Prior to convening this workgroup, DOH and SBOH did not have extensive knowledge of the exotic pet trade within the state. Our limited survey of local health jurisdictions, animal control agencies, and local veterinarians along with our assessment of the exotic pet population in Washington did not reveal significant public health problems at this time. We are aware, however that some human cases of zoonotic diseases occur in the state each year and that national and international events show that zoonotic diseases are threats to public health and outbreaks can occur at any time. Therefore, we recommend that as part of ongoing efforts DOH and SBOH should:

- Continue to collect information and gain familiarity with the exotic pet trade;
- Improve existing surveillance and data collection systems such as the animal disease surveillance system being implemented in collaboration with the Washington Animal Disease Diagnostic Laboratory and continue to work with other state agencies such as WSDA to coordinate reciprocal reporting;
- Assist local health jurisdictions as needed with increasing their awareness of exotic pets in their jurisdictions and developing regulations concerning licensing or registration requirements; and
- Build stronger collaborative relationships with other state agencies, local health jurisdictions, pet owner organizations, veterinarians, and animal rights groups. Integrate these efforts with those of other programs and activities with similar goals and purposes such as the Public Health Emergency Preparedness and Response program activities.

In addition, DOH and SBOH should periodically evaluate additional policy options and regulations and be prepared to exercise their authority to draft and adopt regulations regarding pet animals.

## **Appendix A**

### **Types of legislation, by state, related to ownership of exotic pets**

**States with a ban on private ownership of exotic animals - including non-domesticated felines, wolves, bears, reptiles, non-human primates**

<b>State</b>	<b>Summary of Law</b>	<b>Citation</b>
Alaska	No person may possess, import, release, export, or assist in importing, releasing, or exporting, live game animals as "pets." Live game animals are defined as any species of bird, reptile, and mammal, including a feral domestic animal, found or introduced in the state, except domestic birds and mammals. The Department interprets live game to include all animals, including exotics, such as wild felines, wolves, bears, monkeys, etc., not listed as domestic under Alaska Admin. Code tit. 5. §92.029.	ALASKA ADMIN. CODE tit. 5. §92.029; ALASKA STAT. §16.05.940
California	It is unlawful for persons to possess wild animals unless the animal was in possession prior to January 1992. Wild animals include, but are not limited to the following orders: Primates; Marsupialia; Insectivora (shrews); Chiroptera (bats); Carnivora (non-domestic dog and cats); Proboscidea (elephants); Perissodactyla (zebras, horses, rhinos); Reptilia (crocodiles, cobras, coral snakes, pit vipers, snapping turtles, alligators); etc.	CAL. CODE REGS. Tit. 14, §671 and §671.1
Colorado	It is unlawful for persons to possess most exotic species unless it is for commercial purposes. Persons may, however, possess up to 6 live native reptiles, and unregulated wildlife. Unregulated wildlife includes but is not limited to: sugar gliders, wallabies, wallaroos, kangaroos, etc.	2 COLO. CODE REGS. §406-8
Georgia	It is unlawful for persons to possess inherently dangerous animals as "pets." Inherently dangerous animals include, but are not limited to the following orders: Marsupialia (kangaroos); Primates (chimpanzees, gorillas, macaques); Carnivora (canines, felines); Proboscidea (elephants); Crocodylia (crocodiles, alligators, cobras, all poisonous rear-fanged species). Only persons engaged in the wholesale or retail wild animal business or persons exhibiting wild animals to the public will be issued a license to possess inherently dangerous animals.	GA. CODE ANN. §27-5-4 and §27-5-5
Hawaii	It is unlawful for persons to introduce exotic animals for private use into Hawaii. Exotic animals include, but are not limited to: Non-Human Primates, Felidae family (lion, leopard, cheetah); the Canidae family (wolf and coyote); and the Ursidae family (black bear, grizzly bear, and brown bear), etc.	HAW. ADMIN. RULES §4-71-5, §4-71-6, §4-71-6.1, and §4-71-6.5
Massachusetts	No person may possess as a "pet" a wild bird, mammal, fish, reptile or amphibian unless the animal was owned prior to June 30, 1995. A wild bird, mammal, fish, reptile or amphibian is defined as any undomesticated animal that is not the product of hybridization with a domestic form and not otherwise contained in the exemption list.	MASS. REGS. CODE tit. 321, §2.12 and §9.01; and MASS. GEN. LAWS ANN. ch. 131, §77A
New Hampshire	It is unlawful for persons to possess exotic animals, such as felines, bears, wolves, poisonous reptiles, and non-human primates, unless they are exhibitors. However, there are certain noncontrolled animals that may be privately possessed within the state without a license. Noncontrolled animals include, but are not limited to: sugar gliders, non-venomous reptiles, ferrets, etc.	N.H. REV. STATE ANN. §207:14 and N.H. CODE ADMIN. R FIS §802.01, §804.01, §804.02, §804.03,

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State	Summary of Law	Citation
		§804.04, §804.05, Table 800.02
New Mexico	It is unlawful for a person to possess non-domesticated felines, primates, crocodiles, alligators, and wolves.	Policy Statement by the Department of Game & Fish.
Tennessee	It is unlawful for persons to possess Class I wildlife unless they were in possession of the animal(s) prior to June 25, 1991. Class I wildlife includes the following orders: Primates (gorillas, orangutans, chimpanzees, gibbons, siamangs, mandrills, drills, baboons, Gelada baboons only); Carnivores (all wolves, all bears, lions, tigers, leopards, jaguars, cheetahs, cougars); Proboscidea (all elephants); Perissodactyla (all rhinoceroses); Artiodactyla (all hippos and African buffalos); Crocodylia (crocodiles and alligators); Serpentes (all poisonous snakes); and Amphibians (all poisonous species). However, the state does not regulate private possession of species not listed above, such as monkeys and small non domesticated cats (ocelots, servals, etc.).	TENN. CODE ANN §70-4-401, §70-4-403, and §70-4-404
Utah	A person may not possess live zoological animals that are classified as prohibited. Prohibited animals include, but are not limited to, the following families: Ursidae (bears), Canidae (all species), Felidae (all species except non-domesticated cats), Mustelidae (all species), Non-human primates, and certain species of reptiles, etc. However, in rare circumstances a person may possess these animals as a "pet" if the person obtains a certificate of registration from the Wildlife Board. Generally, exhibitors and educational and scientific facilities only obtain these registrations. A certificate of registration is not required for non-controlled species which alligators and crocodiles fall under.	UTAH ADMIN. R. 657-3-17, R. 657-3-24, R. 657-3-25, and R. 657-3-27
Vermont	It is unlawful for persons to possess exotic animals, such as large felines, bears, wolves, poisonous reptiles, and non-human primates as "pets." Persons may possess exotic animals for exhibition and educational purposes if they obtain a permit. Please note that the state statute says a person may not bring into the state or possess an exotic animal unless they obtain a permit. However, no personal possession permits for "pets" are issued to individuals.	VT. STAT. ANN. Tit. 10, §4709
Wyoming	It is unlawful for persons to possess big or trophy game animals. Big game is defined as antelope, bighorn sheep, deer, elk, moose or mountain goat. Trophy game is defined as black bear, grizzly bear or mountain lion. According to WY Fish and Game, it is unlawful to possess all other exotic animals such as, tigers, lions, primates, wolves, bears, etc.	WYO. STAT. §23-1-101 and §23-1-103; WYO. REG. Chapter 10, §5

**States with a partial ban on private ownership of exotic animals, i.e. the law allows ownership of some exotic animals but precludes ownership of the animals listed**

State	Summary of law	Citation
Connecticut	It is unlawful for persons to possess potentially dangerous animals unless the animal was in possession prior to May 23, 1983. Potentially dangerous animals include: the Felidae family (lion, leopard, cheetah, jaguar, ocelot, jaguarundi cat, puma, lynx, and bobcat); the Canidae family (wolf and coyote); the Ursidae family (black bear, grizzly bear, and brown bear); and venomous reptiles, alligators, crocodiles. However, there are no state requirements for a person possessing non-human primates.	CONN. GEN. STAT. §26-40a
Illinois	No person may harbor, care for, act as a custodian, or maintain in his	ILL. REV STAT, ch.

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<b>State</b>	<b>Summary of law</b>	<b>Citation</b>
	possession any dangerous animal except at a properly maintained zoological park, federally licensed exhibit, circus, scientific or educational institution, research laboratory, veterinary hospital or animal refuge. "Dangerous animal" means a lion, tiger, leopard, ocelot, jaguar, cheetah, margay, mountain lion, lynx, bobcat, jaguarundi, bear, hyena, wolf, coyote, or any poisonous life-threatening reptile. However, there are no state requirements for a person possessing non-human primates and other exotic species not defined as "dangerous animals."	720, para. 585/0.1, 585/1, 585/2, and 585/3
Maryland	A person may not import as a household "pet" any live: fox, skunk, raccoon, bear, alligator, crocodile, member of the cat family other than domestic cat, or any poisonous snakes in the family groups of Hydrophidae, Elapidae, Viperidae, or Crotolidae. In addition, a person may not harbor within Maryland any live raccoons, skunks, foxes, wolves, coyotes, bobcats, or any other mammalian wildlife species, or hybrids, for which there is no USDA certified vaccine against rabies, without first obtaining a permit. However, there are no state requirements for private possession of non-human primates.	MD. CODE ANN., NAT. RES. §70D and MD. REGS. CODE tit. 08.03.09, §03
Nebraska	It is unlawful for persons to possess any wolf, skunk, or any member of the Felidae (cats, except domesticated) and Ursidae (bear) families unless the animal was in possession prior to March 1, 1986. However, there are no state requirements for non-human primates and reptiles.	NEB. REV. STAT. §37-477
Virginia	No person may possess nonnative exotic animals that are classed as predatory or undesirable as a "pet." Nonnative exotic animals include, but are not limited to: bears, wolves, coyotes, weasels, badgers, hyenas, all species of non-domesticated cats, alligators, and crocodiles. Persons may possess these animals if they are a licensed exhibitor, i.e. commercial, educational or scientific uses. However, there are no state requirements for a person possessing non-human primates.	4 VAC 15-30-10; 15-30-40
Florida	It is unlawful for a person to possess any Class I Wildlife unless the animal was in possession prior to August 1, 1980. Class I Wildlife includes, but is not limited to the following: chimpanzees, gorillas, orangutans, baboons, leopards, jaguars, tigers, lions, bears, elephants, crocodiles, etc. Persons may possess Class II Wildlife if he or she obtains a permit from the Fish & Wildlife Conservation Commission. Class II Wildlife includes, but is not limited to the following: howler and guereza monkeys, macaques, cougars, bobcats, cheetahs, ocelots, servals, coyotes, wolves, hyenas, alligators, etc. All other wildlife in personal possession not defined as Class I or II Wildlife must obtain a no-cost permit. In addition, FL has promulgated regulations governing possession of Class II and III animals (caging requirements, etc.).	FLA. ADMIN. CODE ANN. r. §68A-6.002, §68A-6.0021, and §68A-6.0022
Michigan	No person may possess as a "pet" any member of the Felidae family (large cats), including their hybrids, any bear species, and any wolf-hybrid unless the animal was possessed prior to July 7, 2000. A prior entry permit must be obtained from the director for all other wild animal or exotic animal species not listed above or regulated by the fish and wildlife service of the United States Department of Interior or the Department of Natural Resources of this state. Prior to an exotic animal entering the state the Department of Natural Resources may require the possessor to have the animal examined by an accredited veterinarian to determine the health status, proper housing,	MICH. COMP. LAWS §287.731, MICH. COMP. LAWS §287.1001-1023, MICH. COMP. LAWS §287.1101-1123

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State	Summary of law	Citation
	husbandry and confinement standards are being met.	

**States that require owners of exotic animals to obtain a license or permit**

State	Summary of law	Citation
Arizona	Persons possessing restricted wildlife must obtain a wildlife holding permit to lawfully possess the animal. The Department issues wildlife holding permits to: (1) individuals who legally possess restricted live wildlife and are moving into the state, (2) for educational display, (3) or advancement of science, and (4) to foster an animal unable to return to the wild. Persons already residing in Arizona are not permitted to possess restricted live wildlife as "pets" unless they qualify for a permit. Restricted live wildlife includes, but is not limited to the following species: all species of Carnivora (canines, felines, excluding domestic); orangutans, chimpanzees, gorillas, alligators, crocodiles, cobras, vipers, etc. However, you can possess all other non-infant primates as "pets" if the animal is free from any zoonotic diseases.	ARIZ. COMP. ADMIN R. & REGS. R12-4-406; R12-4-409; R12-4-417; R12-4-425; R12-4-426
Delaware	All persons must obtain a permit before they can possess a live wild mammal or hybrid of a wild animal. It is illegal to possess, sell, or exhibit any poisonous snake not native to or generally found in Delaware.	DEL. CODE ANN tit. 3, §7201, §7202, and §7203
Indiana	All persons who possess a dangerous exotic animal must obtain a permit for each animal they possess. Dangerous exotic animal includes the following animals: lions, tigers, jaguars, cougars, panthers, cheetahs, wolves, coyotes, jackals, hyenas, bears, venomous reptiles, alligators, crocodiles, gorillas, bonobos, orangutans, Burmese pythons, reticulated pythons, green and yellow anacondas, etc. However, there are no state requirements for private possession of monkeys.	IND. CODE §14-22-26-1 through §14-22-26-11. *not on file
Maine	A person may possess a wild animal after obtaining a permit.	ME. REV. STAT. ANN. tit. 12 § 7235-A
Mississippi	It is unlawful for a person to import or possess any wild animal classified inherently dangerous by law or regulation unless that person holds a permit or is exempted from holding a permit. Inherently dangerous animals include, but are not limited to the following animals: orangutans, chimpanzees, gorillas, macaques, mandrills, baboons, wolves, bears, hyenas, lions, tigers, jaguars, leopards, elephants, etc. However, there are no state requirements for private possession of small non-domesticated felines such as ocelots, servals, etc.	MISS. CODE ANN. §49-8-5 and §49-8-7
New Jersey	All persons wishing to possess a potentially dangerous species must first obtain a permit from the Department. A permit will be issued upon showing that specific criteria have been met. Potentially dangerous species include the following orders: Primates; Carnivora (nondomestic dogs and cats, bears); Sauria (venomous gila monsters); Serpentes (venomous coral snakes, cobras, vipers, pit vipers); Crocodilia (alligators, crocodiles, gavials); Psittaciformes (ring-necked and monk parakeets); and Rodentia (prairie dogs, ground squirrels). Note: very few permits are granted to individuals for private possession.	N.J. ADMIN. CODE tit. 7, §25-4.8 and §25-4.9
New York	No person may keep wildlife unless they have received a permit. Wildlife includes, but is not limited to, the following animals: wolves,	N.Y. ENVTL. CONSERV. §11-

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<b>State</b>	<b>Summary of law</b>	<b>Citation</b>
	wolfdogs, coyotes, coydogs, foxes, skunks, venomous reptiles or raccoons, endangered species, leopards, tigers, lions, cheetahs, ocelots, margays, alligators, etc.	0511, §11-0536, and §11-0917; N.Y. AGRIC. & MKTS. §370.
North Dakota	Category 3, 4, or 5 of nontraditional livestock may be possessed in the state after obtaining an import permit; a nontraditional livestock license; a certificate from a veterinarian. Category 4 is those species that are considered inherently dangerous, including bears, wolves, wolf hybrids, primates, all non-domesticated cats except Canadian lynx, and bobcat.	N.D. ADMIN. CODE §48-12-01-02 and §48-12-01-03
Oklahoma	No person may possess or raise wildlife for commercial purposes without having first obtained a permit. Regardless to whether the possession is actually for "commercial purposes," all persons owning these animals as "pets" must obtain this particular permit.	OKLA. STAT. Tit. 29, §4-107
Oregon	No person may keep an exotic animal unless, before acquiring the animal, the person possesses, or has applied for and not been refused or have been revoked or suspended, a valid permit from the State Department of Agriculture. Exotic animal is defined as any lion, tiger, leopard, cheetah, ocelot, monkey, ape, gorilla, or other non-human primate, wolf or canine not indigenous to Oregon, and bear (except black bear).	OR. REV. STAT. §609.305 and §609.319
Pennsylvania	No person may keep exotic wildlife without first receiving a permit from the wildlife commission. Exotic wildlife includes, but is not limited to all bears, coyotes, lions, tigers, leopards, jaguars, cheetahs, cougars, wolves, and any crossbreed of these animals, which have similar characteristics in appearance or features. However, there are no state requirements for a person possessing non-human primates and reptiles.	34 PA. CONS. STAT. ANN. §2961 and §2963
Rhode Island	No person may possess, without first obtaining a permit from the department, animals of the following orders, families, and genera: Primates, Carnivores, Amphibia, Reptilia, Canidae, and Insecta. All person obtaining a permit must demonstrate they have both adequate facilities, and adequate knowledge of animal health and husbandry to ensure both public safety and health.	R.I. GEN. LAWS §4-18-3; 1994 R.I. PUB. LAWS 12 020 030
South Dakota	A permit is required to possess any non-domestic mammal, or any hybrids thereof of the following orders: Carnivora (Felidae -- non-domestic, Canidae -- non-domestic, Ursidae -- bears, Mustelidae, and Hyaenidae); Artiodactyla (hoofed animals); Perissodactyla (Tapiridae and Rhinocerotidae). In addition, all animals (including those listed above and non-human primates and reptiles) must be examined by a veterinarian and be free of any contagious, infectious, epidemic, or communicable disease. No person may possess non-domestic pigs or raccoon dogs.	S.D. ADMIN. R. 12:68:18:03 and 12:68:18:03.01; and S.D. CODIFIED LAWS ANN. 40-14-2
Texas	No person may possess a dangerous wild animal without first obtaining a license (certificate of registration). Dangerous wild animals are defined as lions, tigers, ocelots, cougars, leopards, cheetahs, jaguars, bobcats, lynxes, servals, caracals, hyenas, bears, coyotes, jackals, baboons, chimpanzees, orangutans, gorillas, or any hybrids of the animals listed. However, there are no requirements for a person possessing all other animal not listed above, such as monkeys, wolves etc.	TEX. HEALTH & SAFETY CODE ANN. § 822.101-116; TEX. LOC. GOV'T CODE ANN. § 240.002(a) and § 240.0025



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### States that do not require licenses or permits to possess exotic animals

State	Summary of law	Citation
Montana	A person may not operate a wild animal menagerie without obtaining a permit. A "wild animal menagerie" means any place where one or more bears or large cats, including cougars, lions, tigers, jaguars, leopards, pumas, cheetahs, ocelots, and hybrids of those large cats are kept in captivity for use other than public exhibition. All other exotic animals entering the state, such as reptiles, monkeys, etc., must be accompanied by a one-time entry permit and an official health certificate.	MONT. CODE ANN. 87-4-801, 87-4-803, and 87-4-804; MONT. ADMIN. R. §32.3.202
Washington	The state does not require persons possessing exotic animals to obtain a permit. This is governed by city or county regulations. However, persons who are bringing exotic animals into the state are required to obtain a health certificate from a veterinarian and present it to the Department of Agriculture. (Department of Agriculture)	WAC 16-54-035
Washington	It is unlawful to import bats, skunks, foxes, raccoons, or coyotes without a permit from the Department of Agriculture. It is also unlawful to acquire, sell, barter, exchange, give, purchase, or trap for retention as a pet or for export any bat, skunk, fox, raccoon, or coyote. (Department of Health)	WAC 246-100-191(2)
Washington	It is unlawful to import into the state or to hold live wildlife that were taken, held, possessed or transported contrary to federal or state law, local ordinance or department rule. Live wild animals, wild birds or game fish shall not be imported without first presenting to the department the health certificate required by the Washington State Department of Agriculture under WAC 16-54-030. 4) It is unlawful to possess or hold in captivity live wild animals, wild birds, or game fish unless lawfully acquired and possessed. (Department of Fish & Wildlife).	WAC 232-12-064
Alabama	No person, firm, corporation, partnership or association may possess, sell, offer for sale, import or cause to be brought or imported into the state the following fish or animals: fish from the genus Clarias; fish from the genus Serrasalmus; Black carp; any species of mongoose, any member of the family Cervidae (deer, elk, moose, caribou), species of coyote, fox, raccoon, skunk, wild rodents or wild turkey. However, there are no requirements for a person possessing exotic animals, such as lions, tigers, monkeys, etc.	ALA. ADMIN CODE r. 220-2-.26
Arkansas	It is unlawful to possess 6 or more bobcat, coyote, deer, gray fox, red fox, opossum, quail, rabbit, raccoon and squirrel. If a person wishes to possess other animals not originally from the state and not listed above then the person must show upon request verification that the animal was legally acquired in the previous state. In addition, possessors of wolves and wolf-dog hybrids must maintain health records, provide adequate care and confinement, and be vaccinated.*	GFC 18.17, *to be designated.
Idaho	All species of mammals, birds, or reptiles that are found in the wild and are not species of special concern may be held in captivity without a permit so long as the possessor retains proof that the animal was lawfully obtained. In addition, before bringing an animal into the state an owner must obtain an import permit and comply with specific caging requirements for the animal.	IDAHO CODE §36-701
Kentucky	A person may possess an exotic animal without obtaining a license. Exotic animals are terrestrial wildlife species which have never existed in the wild in Kentucky or been extirpated from the state and could not be reasonably expected to survive in the wild if introduced.	301 KY. ADMIN. REGS. 2:082

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<b>State</b>	<b>Summary of law</b>	<b>Citation</b>
Louisiana	No person may possess any of the following species or its subspecies of live wild quadrupeds, domesticated or otherwise: cougar or mountain lion; black bear; grizzly bear; polar bear; red wolf; gray wolf; and wolf-dog hybrids. However, any native animals to North America, except wolves and cougars, may be kept with a permit. And any non-native animals to North America, such as lions, tigers, non-human primates, etc, may be possessed without a permit.	LA. ADMIN. CODE tit. 76, §115
Minnesota	Exotic species are classified into 4 different categories: prohibited, regulated, unlisted, and unregulated. Exotic species, such as, lion, tigers, bears, wolves, non-human primates fall into the unlisted category. A person possessing an unlisted animal does not have to obtain a permit, they merely are not allowed to release the animal into the wild.	MINN. STAT. §84D.04, §84D.05, §84D.06, and §84D.07; Minn. R. §6216.0250, §6216.0260, §6216.0265, and §6216.0270
Missouri	A person may not keep a lion, tiger, leopard, ocelot, jaguar, cheetah, margay, mountain lion, Canada lynx, bobcat, jaguarundi, hyena, wolf, coyote, or any deadly dangerous, or poisonous reptile unless such person has registered the animal with the local law enforcement agency in the county in which the animal is kept.	MO. REV. STAT. §578.023
Nevada	Specific animals, set forth in NEV. ADMIN. CODE ch. 503, §110 are prohibited from private ownership except if the animal was in possession prior to February 28, 1994. Examples of animals listed under §110 are the following: alligators, crocodiles, coyotes, foxes, raccoons, etc. However, other exotic animals may be possessed without a permit or license. Examples of these exotic animals are: monkeys and other Primates, Marsupials, elephants, felines, wolves, etc.	NEV. ADMIN. CODE ch. 503, §110; ch. 503, §140; ch. 504, §488.
North Carolina	A county or city may by ordinance regulate, restrict, or prohibit the possession of dangerous animals. In addition, an entry permit from the State Veterinarian is required before importing into the state a skunk, fox, raccoon, ringtail, bobcat, North and South American felines, coyote marten, and brushtail possum.	N.C. SESS. LAWS §153A-131 and §160A-187; N.C. ADMIN. CODE tit. 2, r. 52B.0212
Ohio	No person may bring into the state a non-domestic animal unless the possessor: obtains an entry permit; health certificate certifying the animal is free of infectious diseases; and a certificate of veterinary inspection. Persons in the state possessing non-domestic animals do not need to obtain a permit.	OHIO ADMIN. CODE §901: 1-17-12
South Carolina	It is unlawful to possess wolves or coyotes within the state. It is also unlawful to possess wildlife indigenous to the state without a permit. Specifically, one can not possess members of the Cervidae, Suidae, Tayassuidae (peccaries), Bovidae (bison, mountain goat, mountain sheep), nor can they possess coyotes, bears, turkeys, and furbearers. However, there are no state laws governing the possession of non-domesticated felines, primates, reptiles, and other wildlife not listed above.	S.C. CODE REGS. §50-11-1765 and §50-16-20
Kansas	Exotic wildlife species can be possessed without a license, provided that the exotic wildlife was legally captured, raised, exported, possessed, sold, or purchased or any combination in its place of origin. Exotic wildlife includes those wildlife species which are non-migratory and are not native or indigenous to Kansas, or do not presently exist in Kansas as an established wild population. However, any person possessing a mountain lion, wolf, black bear, or grizzly bear must obtain a license or a permit.	KAN. ADMIN. REGS. 115-20-3 and 115-20-4

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**States that do not have laws governing ownership or possession exotic animals**

<b>State</b>	<b>Summary of law</b>	<b>Citation</b>
Iowa	There are no state laws governing private possession of exotic animals.	N/A
West Virginia	The state only regulates native species to the state. A person possessing a native animal in captivity as a "pet" must obtain a permit. However, there are no state laws governing private possession of exotic animals.	W. VA. CODE § 20-2-51
Wisconsin	There are no state laws governing private possession of exotic animals.	N/A

## **Appendix B-1**

**THE CODE  
OF THE  
KING COUNTY BOARD OF HEALTH**

### **TITLE 8**

**RULES AND REGULATIONS NO. 04-01**

**BOARD OF HEALTH RABIES CODE**

**EFFECTIVE MAY 16, 2004**

**PUBLIC HEALTH  
SEATTLE & KING COUNTY**

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**Title 8**  
**RABIES**

**CHAPTER 8.02 – GENERAL PROVISIONS**

Sections:

- 8.02.010 Purpose and scope
- 8.02.020 Definitions
- 8.02.030 Rabies vaccination required
- 8.02.040 Exemption from title

**8.02.010 Purpose and scope.**

A. Authority is established under RCW Chapter 70.05 for the control and prevention of the spread of dangerous, contagious or infectious disease. This title is enacted as an exercise of the Board of Health powers of King County to protect and preserve the public peace, health, safety and welfare. Its provisions shall be liberally construed for the accomplishment of these purposes. This title governs the protection of human health and safety against the spread of rabies from infected animals.

B. It is expressly the purpose of this title to provide for and promote the health, safety and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this title.

C. It is the specific intent of this title to place the obligation of complying with its requirements upon owners and other persons entitled to possession of dogs, cats, ferrets and other animals, and/or other persons designated by this title within its scope, and no provision of nor term used in this title is intended to impose any duty whatsoever upon King County or any of its officers or employees, for whom the implementation or enforcement of this title shall be discretionary and not mandatory.

D. Nothing contained in this title is intended to be nor shall be construed to create or form the basis for any liability on the part of King County, or its officers, employees or agents, for any injury or damage resulting from the failure of any person subject to this title to comply with this title, or by reason or in consequence of any act or omission in connection with the implementation or enforcement of this title on the part of King County by its officers, employees or agents.

**8.02.020 Definitions.** In construing the provisions of this title, except where otherwise plainly declared or clearly apparent from the context, words shall be given their common and ordinary meaning. In addition, the following definitions shall apply:

A. "Animal control authority" means the county or municipal animal control agency, acting alone or in concert with other municipalities, having authority for the enforcement of the animal control laws, ordinances or regulations of the state, county or municipality, and the shelter and welfare of animals.

B. "Caretaker" means any person authorized by the owner to provide daily management of an animal, including but not limited to maintaining the animal in a controlled or confined manner in accordance with applicable statutes and regulations, and providing the animal with food, water, shelter, sanitary services and health care as required.

C. "Cat" means an animal of the genus species *Felis domesticus*.

D. "Director" means the director of the Seattle-King County Department of Public Health or the director's authorized representative.

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- E. "Dog" means an animal of the genus species *Canis familiaris* and excludes wolf-dog hybrid animals.
- F. "Euthanize" means to humanely destroy an animal by a method that involves instantaneous unconsciousness and immediate death or by a method that causes painless loss of consciousness and death during the loss of consciousness.
- G. "Ferret" means an animal of the genus species *Mustela furo*.
- H. "Livestock" means farm animals, excluding birds, raised for food or fiber production or kept for recreational purposes, including but not limited to horses, donkeys, mules, cattle, sheep, llamas, alpacas, goats, and pigs.
- I. "Mammal" means any of a class of warm-blooded vertebrate animals that nourish their young with milk secreted by mammary glands, have skin generally covered with hair, and includes bats.
- J. "Owner" means any person having legal ownership of an animal.

**8.02.030 Rabies vaccination required.** All owners of dogs, cats and ferrets four months of age or older shall have their animals vaccinated against rabies. Regardless of the age of the animal at initial vaccination, a booster vaccination shall be administered one year later and thereafter on a schedule according to the type of vaccine used, as determined by a licensed veterinarian. All owners of livestock having frequent contact with humans other than their owners and caretakers, including but not limited to animals exhibited to the public at petting zoos, fairs, or other locations or events, shall have such livestock evaluated by a licensed veterinarian and vaccinated against rabies if the veterinarian recommends such vaccination. All rabies vaccinations shall be performed by or under the direct supervision of a licensed veterinarian in accordance with the standards contained in the Compendium of Animal Rabies Prevention and Control, as amended, published by the National Association of State Public Health Veterinarians, Inc.

**8.02.040 Exemption from title.** The provisions of this title shall not apply to dogs and cats in the custody of a research facility registered or licensed by the United States Department of Agriculture and regulated by 7 United States Code 2131, et seq.

### **CHAPTER 8.04 – QUARANTINE**

#### Sections:

- 8.04.010 Management of animals that bite humans
- 8.04.020 Notice of rabies hazard in all or part of King County – Community-wide rabies control period
- 8.04.030 Violation of confinement or vaccination order
- 8.04.040 Management of animals exposed to suspected or confirmed rabies-infected animals
- 8.04.050 [Repealed]
- 8.04.060 Enforcement
- 8.04.070 No appeal to hearing examiner
- 8.04.080 [Repealed]

#### **8.04.010 Management of animals that bite humans.**

A. Reporting of animal bites. Whenever an animal has bitten a human, the incident shall be reported immediately to the director by any health care provider, medical facility, school, childcare facility or other persons or entities having direct knowledge of the incident. Incidents other than bites shall be immediately reported by the same persons to the director when there is

concern about the potential for rabies transmission to a human. Such incidents include, but are not limited to, exposure to a bat or exposure of mucous membranes or an open cut in the skin to the saliva of an animal capable of transmitting rabies if there is reasonable cause to suspect the animal may be infected with rabies. Reasonable cause to suspect rabies infection includes, but is not necessarily limited to, abnormal behavior, neurologic signs, or insufficient knowledge of the history or medical condition of the animal.

B. Whenever the director has knowledge of or reasonable certainty that a dog, cat or ferret has bitten a human or otherwise exposed mucous membranes or an open cut in the skin to the animal's saliva, he or she is authorized to order that the animal be confined for a period of not less than ten (10) days. If the animal is over four (4) months of age and unvaccinated for rabies, the director is authorized to order that the confinement be at the city or county animal control authority in its animal shelter or, upon request and at the expense of the owner, at a veterinary hospital. If the animal is under four (4) months of age or currently vaccinated, at the discretion of the director, confinement may be at the home of the animal's owner or caretaker. The owner or caretaker having possession of the confined animal shall observe the animal daily during the confinement period and report any illness or abnormal behavior immediately to the director, who shall have the authority to order the animal be examined by a licensed veterinarian. If the veterinarian determines signs suggestive of rabies are present, the director may order the owner or caretaker to have the animal euthanized immediately and tested for rabies. If the biting dog, cat or ferret is unwanted or a stray or is severely injured or medically unstable as determined by a licensed veterinarian, the director may order the animal be euthanized immediately and tested for rabies virus.

C. The director is authorized to notify in writing the owner or caretaker of the animal subject to a confinement order. Delivery of a copy of the confinement order to some person of suitable age and discretion residing upon the premises where such animal is found shall be notice of the confinement. The director is authorized to notify the city or county animal control authority and other police officers of the confinement order, and to request their assistance to enforce such order.

D. Other animals. Whenever the director has knowledge of or reasonable certainty that a mammal other than a dog, cat or ferret has bitten a human or otherwise exposed mucous membranes or an open cut in the skin to the animal's saliva, the director is authorized to assess the risk for rabies transmission and may order that the animal be euthanized immediately and tested for rabies virus.

E. According to the provisions of this chapter, unless otherwise ordered by the director, confinement shall consist of housing the animal at the facilities of the animal control authority or a licensed veterinarian, or restriction of the animal to the premises of the owner or caretaker of the animal in a secure manner so as to prevent escape and with no direct contact with other animals or humans other than the animal's direct caretaker.

F. When an animal is to be euthanized and tested for rabies virus, euthanasia shall be accomplished in such a way as to maintain the integrity of the brain so that the laboratory can recognize the anatomical parts, and the whole animal or animal head kept under refrigeration and not frozen or chemically fixed during storage and shipping.

#### **8.04.020 Notice of rabies hazard in all or part of county – Community-wide rabies control period.**

A. Whenever the director determines that rabies is currently a hazard to the public health in the county, or any part thereof, incorporated or unincorporated, the director is authorized to cause a notice of such hazard to be published in a newspaper of general circulation in the area for three (3) successive days, which determination and notice shall declare the community-wide rabies control period and area. Good cause for such notice shall include, but is not limited to, a diagnosis of rabies in any dog or cat, or other veterinary or epidemiological evidence of the



presence of a rabies hazard. It shall be unlawful, within the rabies control area, for any owner or caretaker of a dog, cat or other animal capable of transmitting rabies to fail to secure or confine such animal by leash or escape-proof container during the community-wide rabies control period.

B. The community-wide rabies control period shall be thirty (30) days after the last publication of notice. The director may extend any such period if deemed necessary by publication of one or more additional notices.

C. During the community-wide rabies control period, the director is authorized to institute the following measures for the protection of the public health as he or she deems appropriate:

1. Issuance of orders requiring owners and caretakers of animals capable of transmitting rabies to restrict such animals to their premises unless securely confined by leashes or escape-proof containers;

2. Issuance of orders requiring owners and caretakers of animals three (3) months old or over capable of transmitting rabies to have such animals vaccinated with rabies vaccine by or under the direct supervision of a licensed veterinarian within thirty (30) days after publication of the last notice;

3. Issuance of orders to owners and caretakers of dogs, cats and ferrets requiring proof of rabies vaccination by a licensed veterinarian within six previous months; or

4. Issuance of orders authorizing the impoundment and euthanizing of any animal capable of transmitting rabies found running at large, unless such animal is redeemed from impounding in accordance with the ordinances or rules enforced by the animal control authority having jurisdiction over the animal.

**8.04.030 Violation of confinement or vaccination order.**

A. It is unlawful for any owner or caretaker of any animal subject to an order of confinement or restriction as set forth in Sections 8.04.010, 8.04.020 or 8.04.040 to permit any such animal to come in contact with any other animal or person or to run at large or to be removed from any place of such confinement or restriction without the consent of the director.

B. It is unlawful for any owner or caretaker of any animal subject to a vaccination order as set forth in Sections 8.04.020 or 8.04.040 to fail or refuse to procure the vaccination within the period ordered by the director.

**8.04.040 Management of animals exposed to suspected or confirmed rabies-infected animals.** Any mammal having direct contact with an animal found to be rabid by appropriate laboratory tests, or having suspected exposure to rabies virus from a wild, carnivorous mammal or bat unavailable for testing, shall be regarded as having been exposed to rabies and shall be subject to the requirements of this section, as applicable. For purposes of this chapter, suspected exposure to rabies shall include probable or suspected contact with saliva of a wild, carnivorous mammal or bat through a bite wound, open cut in skin, or onto mucous membranes.

A. Unvaccinated dogs, cats, and ferrets. The director is authorized to order that any unvaccinated dog, cat, or ferret exposed to a suspected or known rabid animal be euthanized immediately or placed in strict isolation, at the option of the owner of the animal. If isolation is chosen, the owner of the exposed animal shall have the animal placed in strict isolation with no direct animal or human contact, at a location and under conditions approved by the director, for not less than one hundred eighty (180) days from the date of rabies exposure as determined by the director, and vaccinated with rabies vaccine thirty (30) days before the end of the isolation period. At the end of the isolation period, the owner of the animal shall have the animal evaluated by a licensed veterinarian for signs of rabies, and shall submit to the director a written report prepared by such veterinarian as to the animal's health status. Any person observing signs suggestive of rabies during or at the end of the isolation period shall report or have a licensed veterinarian

report such signs immediately to the director, who shall have authority to order that such animal be euthanized and tested for rabies virus.

B. Vaccinated dogs, cats, and ferrets. The director is authorized to order the owner or caretaker of any currently vaccinated dog, cat or ferret exposed to a suspected or known rabid animal to have the dog, cat or ferret revaccinated immediately with rabies vaccine, and kept securely confined for forty-five (45) days for observation. Any person observing signs suggestive of rabies during or at the end of the confinement period shall report or have a licensed veterinarian report such signs immediately to the director, who shall have authority to order that such animal be euthanized and tested for rabies virus. The director is authorized to determine the management of dogs, cats and ferrets with expired rabies vaccinations on a case-by-case basis.

C. Livestock. The director is authorized to order the owner or caretaker of any unvaccinated livestock that has been exposed to a suspected or known rabid animal to have such livestock immediately slaughtered or kept under close confinement and observation for not less than one hundred eighty (180) days from the date of rabies exposure as determined by the director, at the option of the owner of the livestock. The owner or caretaker of livestock that has been exposed to a suspected or known rabid animal and currently vaccinated with a vaccine approved by the United States Department of Agriculture for that species shall have such livestock revaccinated against rabies immediately and kept under close observation for not less than forty-five (45) days.

D. Other animals. The director is authorized to order that mammals other than dogs, cats, ferrets, and livestock exposed to a suspected or known rabid animal be euthanized immediately, except that the director is authorized to determine, on a case-by-case basis, the management of such animals maintained in research facilities registered or licensed by the United States Department of Agriculture, or in accredited zoological parks.

**8.04.050** [Repealed.]

**8.04.060 Enforcement.** Subject to the provisions of section 8.04.070 of this title, the director shall have the authority to enforce the provisions of this title in accordance with Chapter 1.08 of this code. The director is also authorized to adopt rules consistent with the provisions of this title, and to notify and request the assistance of the appropriate animal control authority for the purpose of enforcing and carrying out its provisions.

**8.04.070 No appeal to hearing examiner.** Due to the extreme health hazard involved in a rabies outbreak and the necessity for expediency in carrying out the provisions of this chapter and notwithstanding the provisions of any other rules or regulations or ordinances to the contrary, orders issued by the director of public health regarding rabies shall not be appealable to the hearing examiner.

**8.04.080** [Repealed.]

## Appendix B-2

### **Review of SBOH rabies-related rules: WAC 246-100-191 in the context of the updated *Compendium of Animal Rabies Prevention and Control, 2004* by the National Association of State Public Health Veterinarians (NASPHV)**

The June 25, 2004 *Morbidity and Mortality Weekly Report*<sup>97</sup> contained an updated compendium on the prevention and control of animal rabies written by NASPHV. The compendium focuses on practices to prevent rabies in animals but also contains some recommendations to prevent the disease in humans.

1. The updated compendium **recommends that states enact laws that prohibit the importation, distribution, and relocation of bats, skunks, raccoons, coyotes, and foxes.**

#### WAC 246-100-191 (2) and WAC 16-54-125

The language in WAC 246-100-191 2 (a) states that “Except for bonafide public or private zoological parks, persons and entities are prohibited from importing into Washington any bat, skunk, fox, raccoon, or coyote without a permit from the director of the Washington state department of agriculture, as required in WAC 16-54-125.” This language allows importation of bats, skunks, raccoons, coyotes, and foxes if a permit is obtained from the Washington State Department of Agriculture (WSDA) and excludes zoological parks from the permitting requirement. WAC 16-54-125 allows the director of WSDA to issue permits in consultation with DOH to entities that are importing the listed animals. WSDA states that they generally issue permits only to United States Department of Agriculture (USDA) licensed exhibitors after they prove that they are not bringing the animals into the state as pets or to be bred. WSDA generally denies permits to pet owners. Bats are typically only allowed to be imported for research purposes.

WAC 246-100-191 2 (b) expressly prohibits the acquiring, selling, bartering, exchanging, giving, purchasing, or trapping of bats, skunks, raccoons, coyotes, and foxes for the intention of keeping them as pets or exporting them.

2. The compendium **recommends that lab testing be conducted by laboratories designated by the health department and that only the head or brain be submitted for testing** unless that animal is a small one such as a bat.

WAC 246-100-191 does not say that specimens must be submitted to specific laboratories. However, the State Public Health Laboratory in Shoreline is the only lab in the state that conducts rabies testing. The WAC states that laboratories must notify the local health officer (LHO) before testing samples for rabies.

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<sup>97</sup> Centers for Disease Control and Prevention. Compendium of animal rabies prevention and control, 2004: National Association of State Public Health Veterinarians, Inc. (NASPPHV). MMWR 2004;53 (No. RR-9):1-6.

The WAC states that the dead animal's head, brain, or body should be transported in a manner approved by the local health department.

3. The compendium **recommends**
  - a) **That local governments initiate and maintain effective programs to ensure vaccination of all dogs, cats, and ferrets and remove strays and unwanted animals**
  - b) **Considering requiring vaccinations for animals in contact with the public, e.g. livestock/animals in petting zoos, fairs, etc.**

WAC 236-100-191 does not specify which animals must receive rabies vaccines. This is regulated on a local level. In some counties, rabies vaccination is required prior to the licensing of dogs and cats only; vaccine and license requirements vary between counties.

4. The compendium **recommends that humans exposed to the vaccinia-vector oral rabies vaccines be reported to the health department.**

There is no mention of notification in the event of human exposure to vaccinia-vector oral rabies vaccines in WAC 246-100-191 or in the Notifiable Conditions rule (Chapter 246-101 WAC).

5. The compendium **recommends that**
  - a) **Currently vaccinated animals that have been bitten by or exposed to a rabid animal be revaccinated and observed for 45 days**

WAC 246-100-191 provides that the local health officer may require currently vaccinated dogs and cats that have been bitten by or exposed to a rabid animal be revaccinated and observed for 90 days.

- b) **Unvaccinated dogs, cats, and ferrets exposed to rabid animals should be euthanized or placed in strict isolation for six months and vaccinated one month prior to release**

The WAC states that when an unvaccinated *cat or dog* has been bitten or exposed to a rabid or suspected rabid animal, the local health officer shall require either destruction of the exposed animal or vaccination and strict isolation for six months with revaccination one month prior to release. The local health officer also has the authority to take any other action he/she judges appropriate.

- c) **Rabies occurring in vaccinated animals should be reported to public health officials, the vaccine manufacturer, and the USDA, Animal and Plant Health Inspection Service, Center for Veterinary Biologics**

WAC 246-100-191 does not address this situation.

6. The compendium **recommends that dogs, cats, or ferrets that appear healthy and that have been involved with injuries to humans be confined and observed for 10 days.**

The WAC states, “When an animal has bitten or otherwise exposed a person, the local health officer shall institute any or all of the following as judged appropriate:

- a) order testing and destruction of the animal
- b) order restriction of *dogs and cats* for ten days observation
- c) require examination and recommendations by a veterinarian related to signs of rabies, or
- d) specify other appropriate actions for animals considered low risk for rabies.”

7. The compendium offers **guidelines for the consumption of milk and meat products from rabid animals and unvaccinated livestock exposed to rabies.**

WAC 246-100-191 provides restrictions on the sale of milk, meat, hides, and hair from animals infected with anthrax, but does not restrict the sale of consumable products from rabid animals or unvaccinated animals exposed to rabies. However, the compendium notes that federal guidelines for meat inspectors requires that any animal known to have been exposed to rabies in the previous 8 months be rejected for slaughter.

This review does not consider other state agency rules (with the exception of WAC 16-54-125) or local ordinances that may regulate rabies control and prevention.

## Appendix C

### Deleterious Exotic Wildlife in Washington State

The term *exotic* wildlife as used here refers to fish, amphibians, birds, mammals or other animals that are not native to Washington State. *Deleterious* exotic wildlife are animals that pose a serious potential threat to native wildlife or habitat. With few exceptions (such as for research and display), *it is unlawful to import into the state, hold, possess, propagate, offer for sale, sell, transfer, or release live specimens of deleterious exotic wildlife, their gametes or embryos*. (See Washington Administrative Code [WAC] 232-12-017 and 232-12-01701.) To report violations or for more information, please contact your local Washington Department of Fish and Wildlife (WDFW) Enforcement program, or call the Enforcement office at WDFW headquarters (360-902-2936). Please note that importation of all wild animals (including captive wild animal species) must be in compliance with Washington State Department of Agriculture (WSDA) regulations as well as WDFW regulations (WAC 232-12-064). For questions regarding WSDA regulations, call the State Veterinarian's office at 360-902-1878.

As of November 1997, the following species have been designated as deleterious exotic wildlife in the state of Washington:

FISH					
Family Clariidae	Family Cyprinidae	Family Amiidae	Family Characidae	Family Lepisosteidae	Family Channidae
walking catfish <i>Clarias</i> <i>batrachus</i> , and all members of the Clariidae family	diploid grass carp <i>Ctenopharyngodon idella</i> rudd <i>Scardinius erythrophthalmus</i> ide (silver orfe or golden orfe) <i>Leuciscus isus</i>	bowfin (mudfish, grinnel, cottonfish, dogfish) <i>Amia calva</i>	piranha (also pirameba, caribe, pira, piraya, chupita, rodoleira, palometa), and all species of the genera <i>Serrasalmus</i> , <i>Rooseveltiella</i> and <i>Pygocentrus</i>	All gars (alligator, longnose, etc.) <i>Lepisosteus</i> spp.	snakeheads (China fish) and all forms of the genus <i>Channa</i> (or <i>Ophicephalus</i> )

MAMMALS				
Family Viverridae	Family Suidae	Family Tayassuidae	Family Bovidae	Family Cervidae
mongoose, and all members of the genus <i>Herpestes</i>	wild boar <i>sus scrofa</i> , and all wild hybrids	collared peccary (javelina) <i>Tayassu tajuca</i>	All members and hybrids of the following genera: <i>Rupicapra</i> (chamois); <i>Hemitragus</i> (tahr); <i>Capra</i> (goats and ibexes except domestic goat <i>Capra hircus</i> ); <i>Ammotragus</i> (barbary sheep or aoudad); <i>Ovis</i> (sheep, except domestic sheep <i>Ovis aries</i> ); <i>Damaliscus</i> (sassabies); <i>Connochaetes</i> (wildebeests); and <i>Alcelaphus buselaphus</i> (hartebeest);	<b>European red deer</b> <i>Cervus elaphus elaphus</i> , all non-native species of <i>Cervus elaphus</i> , and all hybrids with North American elk; <b>fallow deer</b> <sup>1</sup> <i>Dama dama</i> ; <b>axis deer</b> <i>Axis axis</i> ; <b>rusa</b> (sambar deer) <i>Cervus unicolor</i> , <i>Cervus timorensis</i> , <i>Cervus mariannus</i> and <i>Cervus alfredi</i> ; <b>sika deer</b> <i>Cervus nippon</i> ; <b>reindeer</b> <sup>1</sup> (all members of the genus <i>Rangifer</i> except woodland caribou <i>Rangifer tarandus caribou</i> ); and <b>roedeer</b> (all members of the genus <i>Capreolus</i> )
<i>1 Fallow deer and reindeer outside of the woodland caribou home range may be imported and propagated in Washington under rules established by the Washington Department of Fish and Wildlife.</i>				

AMPHIBIANS	BIRDS	MOLLUSCS
Family Pipidae	Family Anatidae	Zebra Mussels
<b>African clawed frog</b> <i>Xenopus laevis</i>	<b>Mute swan</b> <i>Cygnus olor</i>	<b>Zebra mussels</b> , including <i>Dreissena polymorpha</i> , and other similar species commonly known as <b>quagga</b> <i>Dreissena bugensis</i> (Note: ecological and economic damage potential from these mussels is so great that a law requires bass and walleye tournament boaters to decontaminate their vessels before launching in Washington if they have been east of the continental divide in the previous 90 days.)

Source: <http://wdfw.wa.gov/wlm/exotic.htm>

## Appendix D

### City and county codes regulating the private possession of exotic animals<sup>†</sup>

The following is a partial list of cities and counties that prohibit or regulate the private possession of certain exotic animals. This list excludes provisions on the keeping of animals in residential and agricultural zones. You can view the detailed languages on the Municipal Codes Search Web site: <http://www.mrsc.org/codes.aspx>

<b>Counties with a prohibition on exotic animals:</b>	
<b>King County--11.28.030 Possession unlawful - Exception - Rules and regulations compliance.</b>	The possession or maintenance of an exotic animal within King County by private citizens as pets is prohibited unless the owner possessed or maintained the exotic animal on or before the effective date of this Ordinance 11340 (June 10, 1994), and agrees to promptly act to satisfy the licensing requirements contained in K.C.C. 11.28.040 through 11.28.090 and such rules and regulations as the animal control authority may adopt as provided in Chapter 2.98 regarding the maintenance of such animals. (Ord. 11340 § 2, 1994: Ord. 2473 § 3, 1975)."Exotic animal" means any of the following: 1. Venomous species of snakes capable of inflicting serious physical harm or death to human beings; 2. Nonhuman primates and prosimians; 3. Bears; 4. Nondomesticated species of felines; 5. Nondomesticated species of canines and their hybrids, including wolf and coyote hybrids; and 6. The order Crocodylia, including alligators, crocodiles, caimans and gavials.
<b>Pierce County--6.16 Wild Animals and Reptiles--</b>	No person shall have, keep, maintain, or have in his/her possession or under his/her control, within unincorporated Pierce County, any lion, tiger, bear, chimpanzee, gorilla, cougar, mountain lion, badger, wolf, coyote, fox, lynx, or any other vicious or venomous/poisonous wild animal. However, a person may keep potentially dangerous wild animals other than the listed animals if they obtain a permit from Tacoma-Pierce county Humane Society.
<b>Skagit County--7.04 Wild or Vicious Animal or Reptiles--</b>	No person shall have, keep or maintain or have in his possession or under his control within the unincorporated area which is residential any wild or exotic animals as herein defined. Note: Skagit County has a Committee on exotic or wild animals as described in 7.04.055
<b>Counties with prohibitions or permit requirements on exotic animals, dangerous animals, or wild animals:</b>	
<b>Douglas 6.04.330 Dangerous animals and potentially dangerous dogs.</b>	All dangerous animals and potentially dangerous dogs within the county shall be registered pursuant to Section 6.04.410. The willful refusal to register a dangerous animal or a potentially dangerous dog pursuant to Section 6.04.410 shall be punishable as a gross misdemeanor. (Ord. 97-02-005 § 14)
<b>Island County 6.20.030 Prohibitions on Inherently Dangerous Mammals--</b>	No person shall own, harbor, possess or have custody or control of felidae in the unincorporated area of Island county. Inherently Dangerous Mammals means: Canidae, including any member of the dog (canid) family not customarily domesticated by man, or any hybrids thereof, including wolf hybrids which are a cross between a wolf and a domestic dog. Felidae, including any member of the cat family not customarily domesticated by man, or any hybrids thereof, but not including domestic cats.
<b>Lewis County 6.05.050 Dangerous Animals--</b>	It shall be unlawful and a public nuisance for an owner or keeper to allow any animal, either predatory or nonpredatory, which, due to its size, habits, or natural propensities or instincts, represents a danger or potential danger to people or property.
<b>Spokane Chapter 5.12 INHERENTLY DANGEROUS MAMMALS/REPTILES</b>	Harboring and/or owning an inherently dangerous mammal and/or an inherently dangerous reptile by a



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<p>person under the age of eighteen years of age or without an annual license is a misdemeanor. (Res. 96-1007 § IV, 1996)</p>
<p><b>Thurston 9.10.056 Venomous and constrictor reptiles.</b> A humane and secure facility shall be provided for constrictor type reptiles over eight feet in length and all venomous reptiles. Escape of any venomous reptile or constrictor type reptile must be reported immediately to animal services. Failure to comply constitutes a misdemeanor. (Ord. 11198 § 2 (part), 1996) <b>9.10.070 Potentially dangerous dog or dangerous dog.</b> The animal services director or designee shall have authority to classify other pet animals as dangerous under the same criteria as used in Section 9.10.070A for dogs.</p>
<p><b>Walla Walla 6.04.370 Wild or vicious animals--Permit required.</b> A. No person shall have, keep, or maintain, or have in his or her possession or under his or her control, within any area of the county, any wild animal as defined in this chapter; provided, however, that in those areas zoned other than residential such animals may be allowed by permit approved by the board of county commissioners or its duly appointed representative. <b>"Animal, wild"</b> means any live monkey (nonhuman primate), bear, badger, cougar, coyote, raccoon, skunk, fox, poisonous snake, poisonous reptile, leopard, panther, tiger, lion, lynx, mountain lion, wolf or any other warm-blooded animal which can normally be found in the wild state.</p>
<p><b>Whatcom 6.04.070 Exotic and/or wild animal – Permit required.</b> A. Permit. A permit from the animal control authority shall be required for any person, firm, corporation or business to own or maintain any wild or exotic animal for the creation of a sanctuary. No person shall be permitted to own, harbor, or maintain any wild or exotic animal for any purpose of other than the creation of a sanctuary.</p>
<p><b>Counties with no codes on possessions of exotic animals, dangerous animals, or wild animals</b></p>
Clark
Clallam
Jefferson
Kitsap
San Juan
Yakima
<p><b>Cities with a Prohibition:</b></p>
<p>The following cities prohibit the private possession of at least large cats; wolves; bears; dangerous reptiles, such as alligators and crocodiles; and most non-human primates:</p>
<p><b>Bainbridge Island</b> -- No person shall keep wild animals. Wild animals are defines as poisonous reptiles and arachnids, crocodilians, wolves and hybrids, and all species of non-human mammals.</p>
<p><b>Battle Ground</b> -- It is unlawful for any person to bring into the city, or to possess or maintain within the city, any exotic animal. "Exotic animal" includes any live member of the canidae, felidae, or ursidae families, as well as venomous reptiles, rear fang snakes, crocodiles, alligators, and caimans.</p>
<p><b>Bellevue</b> -- No person may possess or maintain an exotic animal. Exotic animals include venomous snakes, non-human primates and positions, bears, crocodilia, non-domesticated felines and canines and hybrids.</p>
<p><b>Bellingham</b> -- No person shall possess within city limits a lion, tiger, bear, gorilla, lynx, cougar, jaguar, coyote, or venomous snake, or any other native species to Washington.</p>
<p><b>Carnation</b> -- No person may possess an exotic animal within city limits.</p>

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<b>Des Moines</b> -- No person shall keep or maintain a live monkey, lion, tiger, bear, cougar, mountain lion, badger, wolf, coyote, fox, lynx, or poisonous reptile, or any other dangerous, carnivorous wild or exotic animal or reptile.
<b>Everett</b> --6.04.120 No person shall possess, breed, import, export, barter, buy, or sell any non-human primate, wild cat, bear, wild canidae and hybrid, venomous reptile and amphibians, reticulated pythons or alligators.
<b>Federal Way</b> -- Adopts the King county ordinance
<b>Lakewood</b> -- Prohibits private possession of exotic animals as "pets."
<b>Puyallup</b> -- No person may possess an exotic animal within city limits unless the exotic animal was in private possession prior to April 2000.
<b>Spokane</b> -- No person may harbor an inherently dangerous animal within the city unless the exotic animal was in private possession prior to September 25, 2000. "Inherently dangerous animal" includes: Canidae (any member of the dog family, excluding the domesticated dog and wolf hybrids), Felidae (any member of the cat family and their hybrid, excluding the domesticated cat), Ursidae (any member of the bear family and their hybrid), Non-human primates and positions (such as monkeys, chimpanzees, lemurs), and Reptilia (any member of the reptile family which are venomous, are part of a rear fanged snake family, and any crocodile, alligator, and caiman).
<b>Tacoma</b> -- Prohibits private possession of reptiles, lions, tigers, and bears as "pets."
<b>Note:</b> Most of the cities in the vicinity of King County have adopted the King county ordinance on exotic animals.
<b>Cities with a Regulation</b>
The following cities require the possessor of a wild or exotic animal to obtain a license or permit from the relevant state or local agency to privately possess the animal:
<b>Blain --6.12.100</b> Exotic hybrid and/or wild animal permit required.
<b>Olympia--06.04.40 Exotic Animals.</b> Owners of constrictor type reptiles over eight foot in length, venomous reptiles, and primates are required to annually register such animals with Animal Services by completing a form provided by Animal Services. Failure to register such animals shall be a misdemeanor.
<b>Tumwater --64.04.040 Exotic animals-Permit Required.</b> Owners of constrictor type reptiles over 8 feet in length, venomous reptiles, and primates are required to annually register such animals with Animal Services by completing a form provided by Animal Services. Failure to register such animals shall be a misdemeanor.

<sup>†</sup> This is not a comprehensive list of local ordinances in Washington that address exotic, wild, or dangerous animals.



## Zoonotic Diseases & Exotic Pets

This 10-minute survey is intended for personnel in local health jurisdictions that receive, document, or manage a) reports of animal-human encounters that put humans at risk for animal-borne diseases and/or b) cases in which a disease has been transmitted from an animal to a human. Please do not include situations related only to animal welfare in your responses. Our goal is to collect information relevant to human health risks.

The information you provide will help the State Department of Health (DOH) and the State Board of Health (SBOH) assess the extent of the risk related to the presence of exotic pets in Washington. The information will be compiled and used as part of a report that will include recommendations regarding rules related to exotic pet importation, breeding, handling, distribution, and ownership.

For the purpose of this survey, exotic pets are defined as follows:

Exotic Pets: Wild mammals and reptiles that are not native to Washington State and are privately owned. This includes animals that have been imported or bred in captivity but are not "domesticated" such as wolves, other wild canines and large cats, iguanas, lizards, turtles, snakes, monkeys, prairie dogs, hedgehogs, sugargliders, etc.

Name:

Title/Position:

Business Phone Number:

Business E-Mail:

- 1 **Your County. If your local health jurisdiction includes more than one county or you work for an animal control agency that services more than one county, please list all that apply.**

- 2 Please estimate how many of the following types of reports your agency received regarding exotic pets in the past five years. (If you have been in your jurisdiction less than five years, please use your experience to estimate or extrapolate the number for a 5-year period). Exclude incidents involving domestic dogs and cats.

	<input type="checkbox"/> None	<input type="checkbox"/> 1 to 3	<input type="checkbox"/> 4 to 6	<input type="checkbox"/> 7 to 9	<input type="checkbox"/> 10 or more
Reports of bites and scratches or other injuries to humans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complaints of loose animals, noise, or odor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reports of disease transmission to humans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complaints about exotic animals in school classrooms or other exhibits accessible to children in which a citizen expressed concern about potential disease transmission or injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complaints about neighbors' exotic pets in which a citizen is concerned about his/her own safety should the animal escape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other types or reports or complaints (please describe below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please describe other types of complaints

- 3 How many exotic pet breeders and/or dealers do you know of that operate in your jurisdiction? Exclude domestic dog and cat breeders/dealers unless they also breed/deal exotic pets.

- ☐ Not known
- ☐ None
- ☐ 1 to 3
- ☐ 4 to 6
- ☐ 7 to 9
- ☐ 10 or more

- 4 Please select the types of animals that are bred or sold by the breeders/dealers referred to in question #3. You may select more than one.

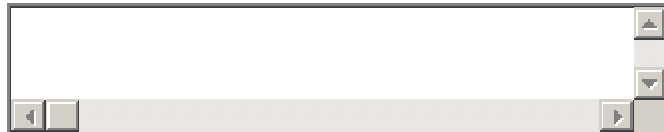
- ☐ Not known

- ☐ Wolves, other wild canines
- ☐ Large cats
- ☐ Reptiles (e.g. iguanas, lizards, turtles, snakes)
- ☐ Non-human primates
- ☐ Prairie dogs, hedgehogs, or sugargliders
- ☐ Other

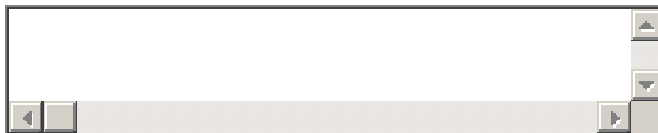
5 **Have there been any environmental health or communicable disease concerns brought to your attention with respect to any of the breeders/dealers referred to in question #3? If yes, specify the type of animal(s) associated with the circumstance, if known.**

- ☐ Yes
- ☐ No

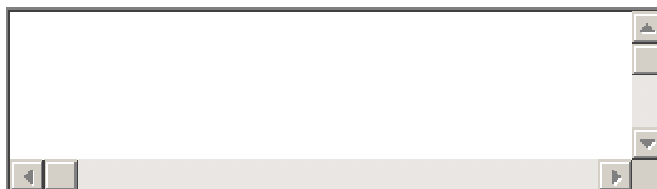
If yes, type of animal(s) involved

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6 **Is there someone else in your county (e.g. an animal control officer or zoonotic disease specialist) that would be able to provide answers to the questions in this survey? If yes, please give us the name, title/position, email address, and phone number of that person.**

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7 **Any additional comments regarding zoonotic diseases & exotic pets in Washington State?**

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Finish

## Appendix F

### CSTE Position Statement

#### 03-ID-13

**Committee:** Infectious Diseases

**Title:** Developing Importation and Exportation Restrictions on Exotic and Native Wildlife with Potential Adverse Impact on Public Health

\* Definitions: Exotic Wildlife: Any wildlife that is not native to the United States including mammals, birds, reptiles, amphibians. Native Wildlife: Any wildlife that is native to the United States.

#### **Statement of the Problem:**

A lucrative and largely unregulated trade in imported exotic wildlife is thriving in the United States. This trade poses a risk of introducing and disseminating exotic zoonotic pathogens. These pathogens threaten both human and animal health, and have the potential to become established and maintained in native animal and insect reservoirs. On June 11, 2003, an emergency executive order was implemented by the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC) banning the importation, interstate and intrastate movement of certain African rodents and prairie dogs in the United States in response to an outbreak of monkeypox in animals and humans. To protect public health, this order should be permanently sustained and expanded to restrict the importation, exportation and movement of exotic wildlife with potential adverse impact on public health. This is a joint statement of the National Association of State Public Health Veterinarians (NASPHV) and the Council of State and Territorial Epidemiologists (CSTE).

#### **Position to be Adopted:**

NASPHV and CSTE recommend that a working group consisting of representatives from the CDC; U.S. Department of Agriculture (USDA), FDA, U.S. Fish and Wildlife Service (USFWS), and NASPHV and CSTE be formed with goals of rapidly:

- Developing recommendations for effectively restricting the importation and exportation of exotic or native live or dead wildlife having a potential impact on public health, except for legitimate scientific use, exhibition in an accredited zoological institution, or captive breeding in programs for conservation or species survival in an accredited institution. These recommendations should include:
- Identifying the responsibilities of various federal agencies with regard to regulation of importation of exotic wildlife and exportation of exotic and native wildlife.

- Developing methods to monitor and maintain ownership and movement data on all imported wildlife and to enforce institutional responsibility in maintaining exotic wildlife so that they are not redistributed for private ownership and recreational purposes.
- Monitoring and assuring legitimacy and safety of interstate movements and redistributions of exotic wildlife.
- Supporting state and local public health infrastructure in identification and response to public health threats from diseases introduced and transmitted from exotic wildlife.
- Working with zoos and research institutions to develop policies to reduce risks of introduction of disease into their collections.
- Collecting comprehensive data on the distribution channels for exotic wildlife in the pet trade. Develop a national action plan to restrict the redistribution and translocation of all exotic wildlife to legitimate scientific and exhibition purposes.

**Background:**

Exotic wildlife is bred, traded, sold, and purchased for private ownership in most states. Health department and animal control officials are often consulted following animal bites and other exposures. Assessment of these exposures requires special attention due to the potential for rare and fatal zoonoses, severe injuries, and serious wound-related infections.

Zoonoses posing serious or fatal risks for humans, such as herpes B virus, monkeypox, plague, simian immunodeficiency virus, rabies and tularemia, have been transmitted from infected exotic wildlife to humans. More than 60% of newly recognized emerging infectious diseases, including hantaviruses, arboviruses, arenaviruses, and monkeypox, are zoonotic. There are no licensed vaccines or medical treatments to prevent or protect exotic wildlife against zoonotic disease. Due to the close relationship between humans and the animals in their care (including pets) there is potential for interspecies exchange of a wide spectrum of disease-causing organisms. Currently, the exotic and native wildlife pet trade does not maintain sufficient records to allow trace backs or trace forwards after problems are identified. Extensive interstate and intrastate movement and mixing of animals from various sources occurs. State and local regulations vary widely regarding restrictions on the maintenance of exotic and native wildlife in private ownership, however, most states do not have regulations which effectively address this issue. Federal regulations involve many agencies and as they are enforced presently, these regulations lack the ability to effectively control the public health risks of exotic wildlife in the pet trade. The exotic and native wildlife trade raises complex issues of animal welfare, public health, and conservation.

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Accredited zoological parks and bona fide research facilities mandate specialized training for handlers, and enforce strict protocols concerning zoonotic disease and injury hazards associated with captive animals. In contrast, well-intentioned pet dealers, breeders and private owners generally lack the expertise to maintain exotic and native wildlife safely, and consequently put humans and other animals at risk for disease and serious injury.

Coordination with Other Agencies/Organizations:

### **Agencies for Information:**

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